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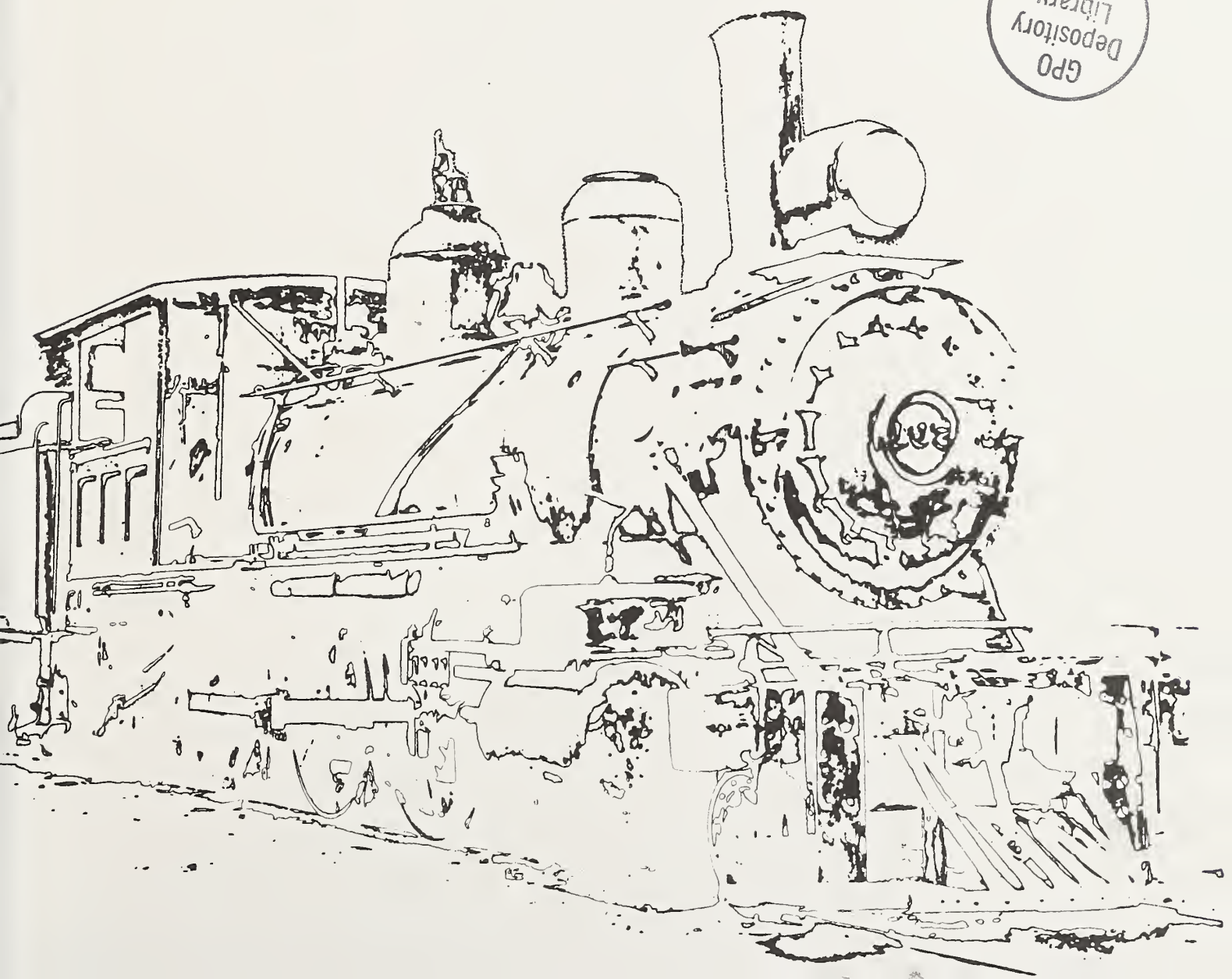
Cultural Resources Management

Jemez Mountains Railroads

Santa Fe National Forest

Vernon J. Glover



Cover: A rendering of the Santa Fe Northwestern's Locomotive Number 107. Originally purchased by the A&P, it served with the AT&SF until 1930 and then for the SFNW until 1942.

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New Mexico

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ACKNOWLEDGEMENTS

It is customary with local histories to have many contributors, but this effort is unusual for both the number of them and the significance of their contributions. As a result, the final text can be said to be a reasonably complete and comprehensive story of the railroads in and around the Jemez Mountains of northern New Mexico. Ellen Glover, the author's wife, aided immeasurably with her work in editing, clarifying, and providing a balance between the jargon-laden railroad history, and the needs of the general reader. In a similar manner, David "A" Gillio of the Forest Service has offered his usual fine job of editing for a publication, a thankless and time-consuming task which is the last line of defense against errors and inconsistencies.

Typesetting for this volume was accomplished on the Forest Service's Data General Computer. Under the leadership of the Recreation staff unit's Chief Clerk, Dana Woodworth, the text was entered into the computer. She was assisted by Pat Smillie and Berlinda Gaddy. All three ladies volunteered their time for the project and their work is much appreciated.

The name of Henry E. Bender, Jr., now of San Jose, California, must stand at the head of the list of contributors to this work. Around 1960 he interviewed a number of the participants in the construction and operations of the concerned railroads and, in addition, he gathered together the meager information then available. He carefully preserved all of this information in its most complete form, and made it available to the author over twenty years later. It can be said that Henry's collection forms the entire foundation for this book, without which the histories could not have been written.

The second substantial contributor to this effort was Mr. Thomas P. Gallagher, Jr. His information, which included significant company documents as well as personal recollections, provided another authentic foundation for the interpretation of the many random bits of information that came to light. Further, Mr. Gallagher took the trouble to read and comment on the draft manuscript. His contributions will benefit all readers of this text.

A number of others have made contributions of significance, notably Donna Broudy, Joseph P. Hereford, Jr., John B. Moore, Jr., and Bill Lock. Their researches and interviews have illuminated many dark corners of the history, and their work has added considerable authority to the history. Boyd Curnutte, Don Hammond, C. O. Clark, Jon H. Tuthill and Milton Seligman were among those who shared their memories, records and photographs with the author. Yale Weinstein's special contribution was the sharing of his collection of snapshots and his knowledge which provided a vivid view of life in the logging camps of the late 1930s. Gene Harty and Rose Mary Gleason Harty provided photographs from the "Red" Gleason and Charlie Pratt family albums. And yet another group offered guidance to the author on where to dig and who to talk to for information: Ed Mecham, John Adams, and Bryan Johnson.

The writing of railroad history, even of such obscure railroads as these, depends very much on a group of devoted railroad and locomotive historians. Their broad grasp of the technical history was essential in defining the locomotives and physical plant of railroads. Doug Richter, Bert Ward, Fred Springer, Bob Pounds, Martin Lehnis and Ed Mahoney provided the essential details of the locomotive roster and rolling stock list. Connie Menninger of the Kansas State Historical Society searched the Atchison, Topeka & Santa Fe Railway archives to come up with invaluable information regarding the relationships between the short lines and their main line connection.

INTRODUCTION

The story of the railroads which penetrated the vast expanse of the rugged Jemez Mountains in northern New Mexico is both a history of the land and a saga of men with great ambitions. The land, long inhabited the Jemez Indians, was conquered by Spanish invaders, only to be taken over a few centuries later and exploited again by American businessmen. With them came the railroads that were so necessary to support the industrial practices of the time in lumbering, mining, and general land development.

Both of the railroads chronicled in these pages were built during the boom years of the 1920s and, in the flamboyant style of the times, they were expected to prosper beyond any rational bounds. Both lines cost, in fact, far more to build than even their most optimistic traffic projections ever could have justified; and they operated in the shadow of constant financial difficulties.

The two lines were far longer, and thus more expensive to run, than comparable railroads operated by similar enterprises in New Mexico. In addition both industries served by the railroads -- coal and lumber -- were extremely competitive. Supplies were plentiful, prices fluctuated wildly, and customers changed suppliers frequently over small fluctuations in price, quality, or delivery schedules.

Neither railroad was able to achieve efficient operations or attain a steady income. Whenever traffic volume reached high levels, something always happened to cause a shutdown. Over the years costs remained high, markets weakened, and one after another the companies failed, even after reorganizations and infusions of new capital. By 1941 both railroads had become obsolete, and were abandoned.

Nevertheless, the early promoter of the railroads, Sidney Weil, has been confirmed as a man of vision. From the vantage point of fifty years, we can easily see that much of what he envisioned and advocated did indeed come to pass. But it only happened many years after his railroads were gone.

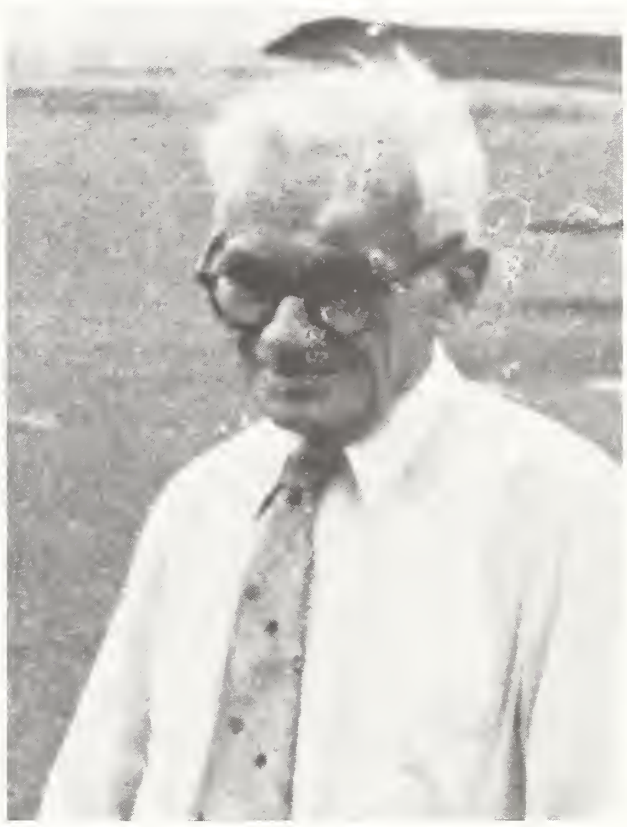

Figure 1. Sidney Weil in August, 1956. Photo from the collection of T. P. Gallagher, Jr.

SANTA FE NORTHWESTERN RAILWAY

The Cañon de San Diego Land Grant

The great Jemez caldera is the immense crater of an ancient volcano. Its once towering sides have slumped and eroded through the ages into a terrain of rounded mountains and high mesas, slashed by deep canyons in the volcanic tuff. Heavy pine and fir timber crowns the heights and slopes of this sun washed land, tapering off into pinon and sagebrush at the lower elevations. Off to the west are the Sierra Nacimientos, the rugged range of mountains lying between the valleys of the Jemez River and the Rio Puerco. And still further west is the desert territory of the Navajo, which extends far into Arizona.

This land has been the home of many peoples. The Anasazi lived there in prehistoric times, and more recently the high country has been the home of the Jemez Indians who ranged far and wide to visit their sacred ceremonial sites (Sando 1982).

The coming of the Europeans brought change to the remote mountains. The Spanish were the first to explore the country extensively; and they recorded its resources of grassy valleys, hot springs reeking of sulphur, immeasurable forests of prime timber, and occasional outcroppings of minerals. The land came to be viewed as valuable and, in time, large tracts were granted by the crown to groups and individuals.

Figure 2. General location map of the Cañon de San Diego Land Grant in northern New Mexico.

One such tract, the Cañon de San Diego Land Grant (Figure 2), an area which ultimately measured 116,289.89 acres, was granted on March 6, 1798, to Francisco and Antonio Garcia de Noriega and eighteen others. It was made by Don Antonio de Armenta, Chief Justice of the Pueblo of Jemez, on the authority of Don Fernando Chacon, Governor of the Province of New Mexico (Broudy 1983).

The grant extended about 16 miles from north to south and 12 miles from east to west at its widest point. It was then, as now, characterized by high ponderosa pine-covered hills cut by several very deep canyons which had been formed by the major rivers flowing through the volcanic rock. The canyons generally run from north to south. Through the eastern canyon flows the Rio Jemez, and the Rio Guadalupe runs down the western canyon to join the Rio Jemez near the southern boundary of the grant. Cutting through high hills and mesas, these interconnecting canyons still provide the only practical access routes to much of the grant by either road or trail (USGS Quadrangle Maps: Jemez and Jemez Springs).

The holders of the grant, heirs of the original grantees, were confirmed in their ownership by the United States Congress on June 21, 1861. Shortly afterward the grant directors made allotments of the best arable land to various families among the heirs, amounting to about 6,000 acres. The remainder of the grant was retained as common property (Broudy 1983; Calkins 1937).

One of the main lines of the Atchison, Topeka & Santa Fe (AT&SF) system was projected to run up the Jemez River valley on its way west from the Rio Grande valley toward California. The early surveys routed to proposed Atlantic & Pacific (A&P) track northwest from Bernalillo up the Jemez River, then west around the north side of the San Mateo mountains. When the AT&SF attempted to purchase the necessary acreage in Bernalillo for yards and facilities, they met with staunch opposition from Don Jose Leandro Perea. Even after a visit by Lewis Kingman and A. A. Robinson of the AT&SF during February, 1878, the old gentleman placed such a high price

on his lands that the railroad moved its planned terminal to Albuquerque (Fierman 1961).

A few years later the AT&SF brought further recognition to the Cañon de San Diego Land Grant when the New Mexican Railroad, a subsidiary of the AT&SF, defined its Route Number 16 as follows in 1882:

> Beginning at the best point on the constructed line of the New Mexico & Southern Pacific Railroad [the construction subsidiary of the AT&SF] in the vicinity of Bernalillo, thence in a westerly direction along the valley of the Rio Jemez and the slopes and tributaries thereof to the vicinity of the Jemez hot springs; and a distance of Forty (40) miles in Bernalillo County...." (n. d., AT&SF RR, Engr. Dept. Letter Book).

The New Mexican Railway never built its projected line but interest in the grant continued. During the next few years the area around Jemez Springs became known as something of a health and summer resort.

Mariano Otero had been grazing sheep on the Grant since about 1870. From time to time he purchased tracts of the privately-owned land within the grant, always specifying that with the purchase he also obtained the seller's share in the common lands of the grant. Upon Otero's death in 1904 his heirs claimed ownership of the entire grant. Naturally, the other owners of the grant took exception to these claims, and took the matter to court. Unable to pay their attorney, A. B. McMillan, these land owners offered him half of their interest in the grant. Within a short time, the court ruled in favor of McMillan's clients, recognizing their ownership as well as Otero's. To equitably divide the grant among the many claimants, the court on July 22, 1904, ordered the grant sold (Broudy 1983; Calkins 1937).

On August 22, 1904, the Cañon de San Diego Land Grant was sold by court order to Joshua S. Reynolds, who immediately turned over the title to the Jemez Land Company. The officials of the latter company were Alonzo B. McMillen and Herbert F. Reynolds. Thirteen years later, on October 29, 1917, the Jemez Land Company sold rights to mine the sulphur deposits on the grant to John J. De Praslin who announced plans to build a railroad northwest from Bernalillo into the grant area. Within a few years De Praslin became deeply involved with the coal mines at Hagan, over to the east beyond the Rio Grande; and his sulphur mining venture withered on the vine. Several more years were to pass before another railroad into the Jemez Mountains was announced (Broudy 1983; Calkins 1937).

Building the Santa Fe Northwestern Railway

The next railroad project into the Cañon de San Diego Grant was announced during the summer of 1920. This venture was to be called the Santa Fe Northwestern Railway (SFNW); and it was incorporated in New Mexico on August 20, 1920. Its stated purpose was the development of the coal, copper, timber and sulphur resources of the Jemez Mountains. The proposed route, however, skirted the west side of the mountains instead of heading up the canyons into the center of the grant (Price, Waterhouse & Company 1926).

As initially envisioned the line was to have been a 55 mile long standard gauge railroad extending from Bernalillo, New Mexico, to the tiny village of La Ventana in northern Sandoval County. The route would have taken it through the pueblos of Santa Ana and Zia, past the village of San Ysidro, and across a long stretch of arid land suitable only for grazing. Its projected terminal at La Ventana was close to some promising but undeveloped coal deposits. A few miles to the north lay the copper mines at Senorita, while the timbered Nacimiento Mountains lay to the east. Undeveloped gypsum deposits were known to exist near San Ysidro as well (Albuquerque Morning Journal, August 12, 1920; New Mexico Railroader May 1961).

The promoter of the SFNW was Sidney Weil, an Albuquerque promoter who was also interested in many other development schemes at the time. Weil was one of the directors of the new railroad company, and the others were also Albuquerque businessmen: Ivan Grunsfield, J. E. Cox, and Lloyd Sturges. The authorized capitalization of the SFNW was listed at $1,000,000, a sum well beyond the resources of the incorporators.

Weil was an energetic character, seemingly involved in almost everything going on in Albuquerque at the time. His record confirms that he was a visionary and a grand persuader, although he was constantly in financial difficulty. At one time or another, he was concerned with raising money to build the Franciscan Hotel, promoting the Miss Albuquerque

Pageant, and developing the early beginnings near the town of the Army Air Corps base, which was later to become Kirtland Air Force Base. But many of his other interests were of such a sleazy nature that they must charitably be called promotions or scams.

> "Sidney Weil was a little guy, about yay high," said his barber, Steve Gonzalas, "He was a good promoter, but he was always owing people money. He was a good ducker. When he'd see somebody he owed coming down the street, he'd duck into a bar or store and buy himself a little something. He always came into the shop for a shave five minutes before closing." (Albuquerque Tribune 1985 [September 14] ; 1985 [November 25]).

Weil was not promoting his railroad without a good understanding of its potential. At the time SFNW was incorporated, it was estimated that there were 425 million board feet of ponderosa pine timber standing on the grant with an additional 2 billion board feet available in the adjacent Santa Fe National Forest. A little further away was the Baca Location or Valle Grande on which stood an estimated 500 million board feet of timber. About this time, Weil evidently obtained some sort of option on the Cañon de San Diego Grant timber.

Weil was acquainted with Paul Reddington, who held a high position with the Forest Service in Washington, D. C., at the time, so he was able to request a timber cruise or survey of the government lands near the grant. The cruise was made, and the report came back concluding that the logging in the Santa Fe National Forest was not a promising commercial venture. The reason given was that the cost of building a railroad into the timber area would be prohibitive

Weil's response to the negative report was to challenge some of the current government practices regarding timber. First, he asked Reddington to allocate all of the Santa Fe National Forest timber to a single mill, something that had not been done prior to that time. Next, he requested that they reduce the minimum charge for timber from $3.50 to $2.50 per thousand board feet. These conditions would make it much more feasible to project and finance a railroad into the mountainous timber district. Reddington and the Forest Service evidently agreed to these proposals, although it was to be nearly a decade before such a timber sale actually occurred.

The AT&SF also came under Weil's persuasive powers. He visited Edward R. Chambers, Vice President, Traffic, who sent John R. Hayden out with Weil to look over the La Ventana coal deposits. Hayden was an industrial and traffic development specialist with considerable experience. "Your coal is good, but develop the lumber," was Hayden's advice. With the results of the timber cruise in hand, Weil talked Chambers into setting a special freight rate which provided for a reduction of $5.00 per thousand board feet in the freight rate for all lumber shipped east of Belen, New Mexico. There was also a discussion of the possible development of the silica and gypsum deposits in the vicinity of San Ysidro, but these were discouraged by a letter from Hayden requesting that this not be done. He acted in the interests of the infant silica and gypsum industries in Kansas which were financially backed by the AT&SF (Weil interview).

Little immediate progress was made toward actually building the SFNW, but a search was carried out for investors who could finance one of the industries which the line was intended to serve. Within a year's time, events transpired which led directly to the construction of the railroad. On May 19, 1921, the Jemez Land Company sold the timber on the Cañon de San Diego Grant to Guy A. Porter and his wife, Mary C. Porter, of Charleston, West Virginia, for $1.00 per thousand board feet. The sum of $50,000 was paid by the Porters at the time of the sale. It was announced at the same time that the Porter Lumber Company intended to build a lumber mill at either San Ysidro or Bernalillo, which was to be supplied with logs by a 22 mile railroad running up into the grant. It began to appear as if the SWNW would have at least one shipper in the lumber business (Broudy 1983; Albuquerque Morning Journal 1921 [July 30]).

The relationship between the SFNW and the Porter interests was better defined on September 21, 1921, when the Jemez Land Company assigned the railroad a right-of-way through the land grant. The intention of the SFNW to build the Porter logging branch was confirmed shortly thereafter when civil engineer J. F. Stewart of the AT&SF was loaned to the SFNW for the job of locating the railroad right-of-way from Bernalillo up the Jemez River into the Cañon de San Diego Grant (Broudy 1983; Albuquerque Morning Journal 1921 [December 8]).

A hint of the problems yet to be faced by the SFNW appeared as engineer Stewart returned to the line in December 1921 to survey alternative routes through two places. He relocated the right-of-way through the Jemez Pueblo lands so as not to interfere with the agricultural acreage. The Jemez Indians depended then, as they do now , on farming a narrow strip of irrigated land in their isolated valley. In addition, an alternate route crossing the Rio Grande near the town of Bernalillo was laid out in case there were problems with the alignment of the original route (Sando 1982; Albuquerque Morning Journal 1921 [December 8]).

Planning the new railroad and sawmill occupied the Porter family throughout 1921 and well into 1922. Although Sidney Weil continued to promote the railroad to La Ventana, the lumbermen pushed the construction of a logging line up the Jemez River. As the months passed, it became increasingly apparent that this would be the first route of the SFNW to be constructed. Keeping steadfastly to his La Ventana promotion, Weil during this time obtained from Guy Porter a "perpetual" trackage right over the Porter railroad between San Ysidro and Bernalillo (Weil 1960).

Guy A. Porter was assisted in his New Mexico work by a number of lumbermen from Charleston, West Virginia. During 1922 his two sons, Frank and Lyman, came out to supervise various parts of the work. Lyman Porter headed west to the Zuni Mountains to supervise the cutting of railroad ties and bridge timbers for the SFNW. Later he returned to the Jemez Mountains to work on railroad construction, and to supervise the logging operations. Frank handled the office work at Bernalillo (Curnutte 1987; Albuquerque Morning Journal 1922 [July 2]).

Rails and fastenings (spikes, rail joints, and bolts) were leased from the AT&SF for an indefinite term, the price being set at six percent per year on an asset value set at $35.00 per ton. As will be seen, the role of the AT&SF was to be a significant one in the building and operation of the SFNW. This was to be expected, for the SFNW was a potentially large source of profitable traffic for the AT&SF; and this, indeed, proved to be the case as the lumber business developed (Albuquerque Morning Journal 1922 [October 16]; ICC 43 Val. Rep. 729).

The AT&SF provided a number of services to the SFNW, mostly of a kind in which the technical skill with which they were performed was important: surveying, bridge design and construction, locomotive maintenance and rebuilding work, and the like. In addition to supplying the rail, the AT&SF provided a number of cars and locomotives to the SFNW over the years. And the provision of this hardware, especially the rail and fastenings, gave backing to the lumbermen. To the SFNW it gave a significant subsidy by reducing the amount of capital needed to get the railroad running. In later years, a number of Santa Fe employees found jobs on the SFNW after they had been laid off or dismissed by the bigger road for serious infractions of the rules. Occasionally the AT&SF would re-hire them after a few months, usually as the result of influence of the railroad brotherhoods and their grievance procedures.

It was during 1922 that the name of lumberman George E. Breece appeared in connection with the Cañon de San Diego Grant. With a financial interest in the Porter Lumber Company, as well as interests in the Zuni Mountains of New Mexico, Breece played an important early role in managing and organizing the project. By June, 1922, the town of Bernalillo had purchased 100 acres of land and had presented it to the lumber company for use as a mill site (Albuquerque Morning Journal 1922 [July 2]; Davis 1945:470; Glover 1986).

In the meantime, the lumbering business had been formally organized. The White Pine Lumber Company (WPL) was incorporated in New Mexico on June 26, 1922, with Guy A. Porter as president and George E. Breece as a director. Three men from Charleston, West Virginia, were also directors: Isaac Lowenstein, M. M. Williamson, and Angus McDonald. Frank N. Porter, by then located in Albuquerque, was treasurer and general manager. The $6,000,000 of authorized capital was rather large, and it may be best viewed as a measure of the incorporators' dreams and certainly not as a representation of the funds actually raised at the time (Price, Waterhouse & Company 1926; NMSCC Annual Report 1923; Albuquerque Morning Journal 1922 [July 2 and November 23]).

During the year, WPL began to purchase heavy equipment for logging. One of the first pieces obtained was an American Standard Model No. 1 log loader, built by the American Hoist and Derrick Company. The loader, purchased during July 1922, was equipped with 7 inch by 8 inch cylinders, two hoisting drums, and an eight-wheel extension

truck. The latter permitted the loader to run on rails on the log car decks (Figure 3) and to cross the gaps between the cars (WPL Chattel Mortage, 1922).

By a contract dated September 26, 1922, WPL purchased the timber on the Cañon de San Diego Grant by assuming the debt of Guy A. Porter to the Jemez Land Company. The purchase price was set at $2.00 per thousand board feet, the amount to be determined by a later timber cruise. Later the parties agreed to conclude the transaction on the estimated basis of 400 million board feet (Price, Waterhouse & Co. 1926).

In the early autumn of 1922, bids for the construction of the SFNW were solicited. The bids were scheduled to be opened on October 13, 1922, a date which indicates the time by which sufficient funds were available to start the building of the railroad and sawmill. As the big day approached, the AT&SF installed a siding and connecting switch for the SFNW at the south end of Bernalillo. A storage yard was set up nearby for the rail and supplies leased from the AT&SF and for the new cross ties arriving from the Zuni Mountains (Albuquerque Morning Journal, October 16, 1922).

Bids for the construction of the SFNW were actually opened on October 16, 1922. The contract was quickly awarded to Sharp and Fellows Contracting Company. Work began shortly thereafter on Wednesday, November 8, 1922, when huge plows were used to break ground for the

Figure 3. American Hoist & Derrick Company log loader lifting logs onto railroad cars, circa 1932. The sets of rails on which the loader moved itself from car to car are seen on the left. Following each move the loader picked up the set of rails it had just vacated and swung it into place ahead. Photo from T. P. Gallagher, Jr., collection.

Figure 4. Rio Grande trestle soon after its construction in early 1923. Of standard AT&SF design, this structure was built of piles driven into the bed of the river. The embankment on the far side of the river shows the grade as the track begins its climb into the hills on the west side of the Rio Grande behind the camera. Photo By M. E. Hanna. Albuquerque Public Library collection.

roadbed in Bernalillo. At least one major subcontract was let for the SFNW work, for Ralph Eggleston and John D. Matthews, both of Albuquerque, were deeply involved with many portions of the railroad construction (ICC 43 Val. Rep. 729 Albuquerque Morning Journal 1924 [September 1]).

As the grading of the roadbed progressed north and west from the Bernalillo mill site, the route of the SFNW became clear. The main line ran north from the mill to the Rio Grande bridge. The river was not controlled by northern dams in those days, and high water was common. Nevertheless, an ordinary pile trestle with its multitude of pile bents was built (Figure 4). This decision resulted in troubles in later years. The low SFNW bridge tended to catch a lot of debris in the periods of high water, and it was frequently in danger of being washed out. During these times, a locomotive and work crew had to be dispatched to clear the trestle of debris and trash (Pratt 1960).

The AT&SF used its own construction crews and a pile driver to build the first three bridges on the SFNW. The first was only a short span over a ditch, and the second was a trestle over the conservancy district irrigation channel. The third bridge was over the Rio Grande. This was a standard pile trestle with 56 bents set 14 feet apart. The pile driver and its crew worked all winter on the Rio Grande trestle, it being a time of low water and sunny if chilly weather. Work was delayed for nearly two weeks at one point when the hammer and leads of the pile driver broke loose and fell into the river. All of the trestles built by the SFNW thereafter were erected with a ground crane, a stationary boom which lifted each bent into place as it was assembled (Albuquerque Morning Journal 1923 [February 6]; 1924 [September 1]).

The new sawmill (Figure 5) was to be a large one with the capacity to cut 120,000 board feet of lumber per day using a double band saw. The mill complex was powered by a steam plant with four boilers and two dynamos. A tall water tank of 110,000 gallons capacity towered over the mill and the 12 acre log pond. It soon became the most prominent landmark in Bernalillo, signifying a new industrial prosperity in the old town. Many of the men in town found regular work in the mill, or el molino as it was called. The regular pay was very welcome in the otherwise poor farming community (The Timberman 1924 [April]; Albuquerque Morning Journal 1924 [September 1]).

Figure 5. The sawmill at Bernalillo soon after its completion in 1924. Milling had not started as evidenced by the absence of smoke from the boilers and the lack of activity in the scene. Photo by M. E. Hanna. Albuquerque Public Library collection.

Figure 6. Typical low pile trestle crossing an arroyo circa 1923. Photo by M. E. Hanna. Albuquerque Public Library collection.

Sidney Weil, the early promoter of the SFNW became less and less involved with the railroad as the lumber interests directed its construction up the Rio Jemez and into the Cañon de San Diego Grant, instead of to La Ventana as Weil had envisioned. In order to pursue his own developments at La Ventana, Weil incorporated the Cuba Extension Railway Company on August 11, 1923, with the same Albuquerque men as backers who had earlier incorporated the SFNW. The Cuba Extension, with authorized capital of $650,000, planned to build a 44 mile railroad from San Ysidro through the La Ventana coal district to the village of Cuba near the copper mines. The further history of this company is related in a following section (Albuquerque Morning Journal, 1923 [August 12]).

Once across the river, the track traversed the rugged slopes of the valley of the Rio Jemez through a long series of cuts and fills in rocky ground. Beyond the cliffs the line dropped down a bit and followed the Rio Jemez to the northwest. The roadbed was simply a mound of loose sandy soil with an occasional short trestle or box culvert. The railroad crossed the Santa Ana Pueblo and Zia Pueblo lands, having obtained right-of-way easements in return for employing Indians from the pueblos to work on the grading and fencing of the line (Weil 1960).

Crossing the lands of three Indian pueblos along the railroad route presented a peculiar problem to the SFNW. A pueblo was not simply a remote village in the emptiness of New Mexico. The pueblos of Santa Ana, Zia, and Jemez were independent, sovereign states created by treaty and the law of the United States with considerable powers of self regulation. It was no small thing to obtain a right-of-way easement across lands that had been occupied and used for centuries, but that was exactly what Weil did. As will be seen in the case of the Jemez Pueblo easement, many difficulties were encountered.

At the tiny farming village of San Ysidro the railroad turned to the north, crossing the Rio Salado and the Rio Jemez on low trestles (Figure 6). Now on the east side of the Rio Jemez, the line approached Jemez Pueblo from the south (USGS Quadrangle Maps: Bernalillo, Santa Ana Pueblo, San Ysidro, Jemez). At this point the railroad became engaged in a right-of-way controversy that took years to settle.

The initial survey of the SFNW simply followed the east side of the Rio Jemez with no concern for the desires of the Jemez people or for their need to use the land for farming. As a result of protests by the Jemez Council, several alternative routes were surveyed during late 1921. During 1922 the right-of-way acquisition process moved through its normal steps, beginning with an appraisal of the property and then, as was hoped, proceeding on to the transfer of title and final payment for the land. Throughout the proceedings, however, the Jemez officials refused to consent to any of the proposed or surveyed

rights-of-way, or to accept any payments. Weil's original promise to give a share of the work to the Jemez people was no longer enough to obtain the right-of-way.

Weil resorted to his powers of persuasion and traveled to Washington, D. C., with two representatives of the Pueblo. They reached an agreement to give the railroad a right-of-way easement, subject to the approval of the Department of the Interior. As far as the SFNW was concerned, the matter ended on March 8, 1923, when the Indian Commissioner in Washington granted the railroad permission to proceed with construction across Jemez Pueblo lands. His authority was an Act of Congress dated March 2, 1899, which was presumed to grant authority for such rights-of-way (Weil 1960; Sando 1982).

The building of the railroad across the Jemez Pueblo land was only the beginning of a long series of legal controversies. Railroad construction proceeded during 1923 with only minor problems, while questions about the legality of the right-of-way became a separate issue which did not directly affect the operations of the SFNW. It was not until March, 1924, that the various Jemez landowners accepted their payments for damages caused by the granting of the right-of-way.

A serious question arose later when, on March 1, 1926, the Pueblo Lands Board wrote the Secretary of the Interior stating that the board had found that title to the right-of-way had not been legally granted. Suit was filed in District Court to resolve the matter, and numerous questions were raised during the process concerning the applicability of various laws and statutes (Sando 1982).

During this period, the SFNW began to have difficulty selling their $1.25 million bond issue because of uncertainty over the right-of-way. In response to local pressures, the Attorney General of New Mexico drafted and sent to a United States Senator from New Mexico a bill providing for the condemnation of pueblo lands. The Pueblo Land Condemnation Act, as it became known, was quickly introduced, passed by both houses of Congress, and signed by President Coolidge on May 10, 1926. Significant flaws were soon discovered in this hastily prepared legislation, and another bill was drafted. The revised legislation was signed into law on April 21, 1928. Then the SFNW reapplied to the Department of the Interior, and its right-of-way was reapproved on July 10, 1928. The Pueblo Land Condemnation Act itself caused numerous problems with the pueblos, and it was ultimately repealed on September 17, 1976 (Sando 1982).

The railroad grade as built followed the east bank of the Jemez River through the pueblo, avoiding the hills and arroyos on the east. Beyond Jemez, the SFNW crossed the Rio Jemez once more at Canyon and proceeded up the west side of the narrowing valley. A few miles further on, the line entered the canyon of the Rio Guadalupe. This point became known as Canyon Landing. The railroad continued up the canyon to the Guadalupe Box or Box Canyon. At this point the open canyon closed in, leaving the railroad facing an abrupt stone cliff. The only opening was a narrow crevasse through which the river flowed in a rushing torrent over rocks and falls (Figure 7). The easy, loose ground construction of the roadbed came to an end, and the much more expensive hard rock work began (USGS Quadrangle Maps: San Ysidro, Jemez).

The grading crews reached the Box during October, 1923, and they stopped working until a pathway through the cliffs could be found. Meanwhile the track gangs continued to work. Only twelve miles of track had been laid out of Bernalillo since February, but the pace was increased to 4,000 feet per day in the autumn months. A second steel gang started work at Mile 32 above Jemez Pueblo. With the two gangs working, rail was laid up to the Box by the end of January, 1924 (Albuquerque Morning Journal 1923 [October 11 and December 9]; and 1924 [January 6]).

The track crews used a small locomotive called "the Dooley." It was said to have been a 2-4-2T Baldwin weighing about twelve tons, and its name may have originated with J. R. Dooley, one of the contractors on the railroad work. The locomotive was in actuality owned by George E. Breece, and it had come with him from West Virginia about 1919. For a time it worked in the Zuni Mountains on the logging railroad between Thoreau and Sawyer. Then, about 1923, it was shipped over to Bernalillo to help build the SFNW. The little engine remained for some time on the SFNW and it was used as a switcher at the Bernalillo mill. It was not long, however, until the small size of the locomotive rendered it more useful as a source of steam than as a locomotive. Its boiler ended its days as a stationary steam supply for the machine shop at Porter (Bruce Crow 1960; Curnutte 1987; Albuquerque Morning Journal 1924 [January 6]).

Figure 7. Guadalupe Box during the railroad era clearly showing the narrow hard-rock canyon. The railroad line can be seen on the left. Photo made by J. D. Jones on September 3, 1930. USDA Forest Service photo 249032. Copied from the collection of Joseph P. Hereford, Jr.

The SFNW track was standard gauge, laid on untreated pine crossties with old 56 and 66 pound-per-yard rail leased from the AT&SF. Much of the rail was of the 56 pound-per-yard weight rolled in 1894, and it had seen heavy use on the main line. Earth was used for ballasting and surfacing the track, especially below the Box (ICC 43 Val. Rep. 729; 249 ICC 342).

The terms of the lease of rail by the AT&SF to the SFNW provided some insights into one of the ways the main line carrier aided the feeder and industrial railroads. The initial lease of December 1922 covered some 16 track miles of light 56 and 66 pound-per-yard rail and fastenings for which the AT&SF no longer had any use. This contract was revised during 1923 to include an additional 45 track miles of similar rail needed to complete the SFNW into the mountains. The new contract, for a term of five years, was approved by the AT&SF during December 1923.

Far too light for even yard or branch line service, the rail was made available to the SFNW for the rental equivalent of six percent interest on a value of $35 per ton. Essentially, this provided rail, joint bars and bolts to the SFNW for a nominal fee of about $14,000 per year, thus relieving the WPL of a capital expenditure of from $150,000 to $200,000 at the open market rates for rail and fastenings. The lease required WPL to furnish a surety bond covering the value of the materials. It also provided that, upon termination, the material be returned to the AT&SF at Bernalillo or purchased from them at the then prevailing market price (W. B. Storey, AT&SF 1927 [September 22]).

Late in 1927 the lease contract was modified to reduce the valuation of the track materials to $30 per ton retroactive to January 1, 1926. It also provided for an additional five track miles which were to be leased to WPL as of March 1, 1927. An additional five track miles of 61 pound-per-yard rail with fastenings was supplied in January 1929. With the added track materials, the SFNW was operating over a total of 71 track miles of leased AT&SF rail, which amounted to approximately 6,753 tons of rail and 488 tons of fastenings (W. B. Storey, AT&SF, September 22, 1927; December 28 and December 29, 1932).

Guadalupe Box

Pushing the railroad through the Guadalupe Box was a job requiring more engineering skill than surveying the entire route from Bernalillo to the Box. Some time earlier, Sidney Weil had hiked into the Box with Robert J. Schmalhousen, the former construction superintendent of the Elephant Butte Dam. Schmalhousen sketched out a route for the SFNW which bypassed the Box on the west by using a series of trestles and tunnels to maintain a steep, but even, gradient. Work on the railroad around the Box apparently began late in 1923, and it took several months to complete (Weil interview; Wickens interview; Price, Waterhouse & Co. 1926).

Although it was a spectacular and expensive piece of construction, the Guadalupe Box railroad was one of the least known and least remarked upon mountain railroads in the southwest. Three-eighths of a mile in length, this segment of the SFNW cost about $500,000 to build, more than half the cost of the entire railroad (Wickens 1960; ICC 43 Val. Rep. 729).

The railroad began its ascent nearly two miles below the Box, climbing steadily higher on the west side of the canyon. Nearing the cliffs, it jumped toward the rocks on a tall timber trestle (Figures 8 & 9) and immediately entered the first tunnel through a spur of rock. A series of fills and trestles clinging to a cliff brought the track to the second tunnel which passed through another rocky outcropping. Beyond the second tunnel, the canyon opened out, and the railroad continued with conventional cut-and-fill construction. Both of the tunnels were hewn from solid rock, but some timber lining was required to support the looser materials. In spite of the rugged terrain, the construction of the remainder of the railroad was termed "light," meaning that only a limited amount of earth and rock work was necessary (USGS Quadrangle Map: San Ysidro; ICC 43 Val. Rep. 729).

An interesting episode occurred in March, 1924, when the Porters announced that an excursion train would be run from Albuquerque up to the Box

Figure 8. The large trestle leading to the Guadalupe Box tunnels during construction, circa 1924. Many features of trestle construction are shown in this view. Note the six piles in each bent, and the numerous horizontal and diagonal braces. The heavy stringers or longitudinal members to support the crossties were being installed at this time. Photo by M. E. Hanna. Albuquerque Public Library collection.

Figure 9. The southern approach to the Guadalupe Box, showing the fills and the high trestle required to reach the tunnels. The roadbed was climbing steadily throughout this section. Photo by M. E. Hanna. Albuquerque Public Library collection.

on March 9th. Special coaches were to be added to AT&SF train number 10 for the journey from Albuquerque to Bernalillo. From that point, a SFNW locomotive would take the cars up to Mile 37, a mile or so below the Box. [See Figure 10 for mileposts and general map of the line.] On March 6 it was suddenly announced that the excursion had been cancelled on the advice of the SFNW attorneys, because, so it was stated, such a train might be construed as an official opening under the rules of the Interstate Commerce Commission. These rules required that regular service be offered to the public thereafter, something the SFNW was not prepared to do. This argument, plausible at the time, takes on the flavor of an excuse for other problems since the SFNW did not even apply for public carrier status until August 12, 1925. This was about a year after it began to operate as a private logging railroad (99 ICC 597; Albuquerque Morning Journal 1924 [March 6]; Price Waterhouse & Co. 1926).

It was not until August 12, 1924, that the tracks were laid through the tunnels to Mile 42.2, a point just above Deer Creek. The opening of the line to log trains had been routinely predicted in the Albuquerque newspapers throughout 1924, and the sawmill had been finished since January or February of that year. Completion of the railroad was delayed by washouts resulting from cloudbursts during the first week in July; the construction camp at Canyon was heavily damaged by floods which washed out several lengths of roadbed (ICC 43 Val. Rep. 729; The Timberman 1924 [January and April]; Albuquerque Morning Journal 1923 [December 9]; and 1924 [March 4 and July 6]).

Logging operations commenced during 1924. Some logging took place below the Guadalupe Box, but most of the trees were cut along Deer Creek beyond the tunnels (Gallagher 1988; Price, Waterhouse & Co. 1926).

Operating a Lumber Industry

It was not until September 2, 1924, that the White Pine Lumber Company sawmill began cutting.

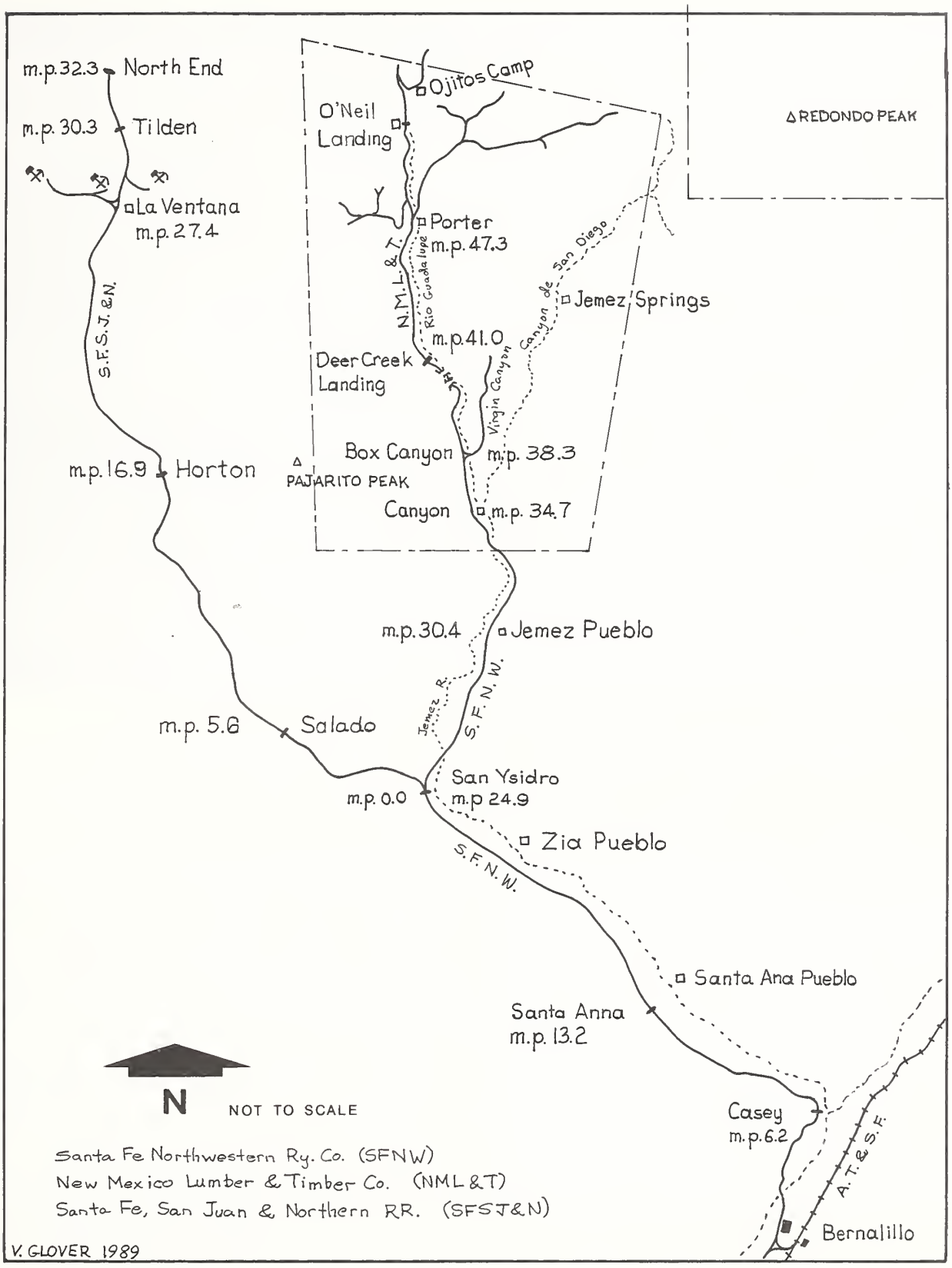

Figure 10. Map of the Jemez Mountain Railroads, drawn by the author. The abreviation "m.p." stands for "mile post" and the longer dashed lines mark the boundary of the Cañon de San Diego Land Grant.

At this time the two companies employed 200 men in the woods and 100 men at the mill. the SFNW owned about 50 miles of track, 42.2 miles of which were the main line; the railroad cost $971,336.08 to build and equip (99 ICC 597; Albuquerque Morning Journal 1924 [September 1]).

All the required machinery had not been installed as yet in the sawmill, and it was producing only at 52 percent of its rated capacity of 120,000 board feet per day. The planing mill was in operation by March 1925, but the second band saw and other machinery was not installed in the sawmill until September 1925 (Price, Waterhouse & Co. 1926).

At this time, the officers of the two companies were listed as shown in Table 1.

Table 1. Officers of Companies Connected With the Timber Operation

White Pine Lumber Company

Officer	Title	Origin
Guy Porter	President	Charleston, West Virginia
Isaac Lowenstein	Vice-President	Charleston, West Virginia
H. M. Williamson	Treasurer	Charleston, West Virginia
Frank N. Porter	Treasurer/General Manager	Charleston, West Virginia
Angus McDonald	Director	Charleston, West Virginia
George E. Breece	Director	Albuquerque, New Mexico

Santa Fe Northwestern Railway

Guy Porter	President	Charleston, West Virginia
George E. Breece	Vice-President	Albuquerque, New Mexico
H. M. Williamson	Secretary	Charleston, West Virginia
Frank N. Porter	Treasurer	Albuquerque New Mexico
Lyman Porter	Director	Albuquerque, New Mexico

Note: by this time Sidney Weil and his associates were entirely out of the SFNW (99 ICC 597; Albuquerque Morning Journal 1924 [September 1]).

At this point it is appropriate to say a few words about George E. Breece. He was to play a continuing role in WPL and its successor, the New Mexico Lumber & Timber Company. George Elmer Breece was born in Roundhead, Hardin County, Ohio, in December 1864. Working in the lumber industry all his life, he became a successful lumberman in his own right in the area of Charleston, West Virgina. Beginning about 1907, his interest in New Mexico pine lumber grew until he was in control of the McKinley Land & Lumber Company (later the George E. Breece Lumber Company) in the Zuni Mountains of New Mexico (Glover 1986).

The advent of World War I interrupted Breece's activities in New Mexico. Breece himself was called upon by the U. S. Army Signal Corps to aid in the spruce logging effort in the Northwest. High quality spruce timber from the western slopes of the Coast Range was the primary structural material in aircraft, then urgently needed in Europe. Breece rose to the rank of Colonel before returning to New Mexico. At the time of his earliest involvement with WPL, he was also operating a large logging operation in the Zuni Mountains and a big sawmill in Albuquerque (Glover 1986).

The WPL began logging around Box Canyon and along Deer Creek and its tributaries in the southwest portion of the Cañon de San Diego Grant. The elevation of the timber country ranged from 6,375 feet at the railroad to over 8,000 feet on the slopes of Pajarito Peak. Logs were skidded by horses down to Deer Creek Landing at Mile 41.0 on the SFNW. The new WPL American log loader loaded logs on the four-bunk skeleton frame log cars (Figure 11), twenty of which had been built by Pacific Car & Foundry during 1924. These cars were little more than a heavy center-sill topped with four crossways bunks to hold the logs.

Figure 11. A steel log car of the SFNW in the summer of 1939 at O'Neil Landing. The structure of the car and the design of the log bunks and folding stakes are clearly shown. Photo by Yale Weinstein.

Chains and folding stakes secured the load during shipment (Weinstein interview; Price, Waterhouse & Co. 1926; White Pine Lumber Co. 1924).

Logging techniques were typical of the period, cutting and skidding being done with a minimum of machinery and only animal power being used for skidding (Figure 12). There are few signs that wheeled devices, such as bummers or big wheels, were used in the Jemez; but their use was common elsewhere in New Mexico. The new American log loader hoisted one log at a time onto the waiting cars.

The railroad acquired two locomotives in addition to "the Dooley." Number 101 (Figure 13) was a new low-drivered 2-6-2T rod lokey from the H. K. Porter Company, Pittsburgh, Pennsylvania. This locomotive carried its fuel and water in tanks on the engine frame, and it was a powerful, compact hauler. About 1930 it was converted to a tender

Figure 12. Although their use was declining, teams of horses were still used to skid logs in the woods in 1932. Photo from the collection of T. P. Gallagher, Jr.

type locomotive (Figure 14) and the side tanks were removed. A similar locomotive purchased the year before had been very successful out on the Breece Lumber Company railroad in the Zuni Mountains. The other locomotive, Number 102, was a 72-ton Climax patented gear drive locomotive, said to have been brought from one of the Porter properties in the east (Glover 1967).

The early operating practice was apparently to run trains of empty log cars up from Bernalillo to Deer Creek Landing, stopping at Box Canyon siding to cut off about half the cars before climbing the steep grade ahead. It was at this point that the grade increased to a long steep climb with a ruling grade of four percent in many places.

A second trip was made from Deer Creek Landing down to Box Canyon to pick up the remainder of the train. In railroaders' jargon this was called "doubling the hill", a phrase which simply meant taking a train up a steep portion of the line in two separate sections. The first section was left in a siding at the summit of the grade, while the locomotive returned for the second

Figure 13. H. K. Porter locomotive Number 101 approaching the scene of the derailment of Number 103, circa 1927. Photo by A. L. "Red" Gleason; from the Gene Harty family collection.

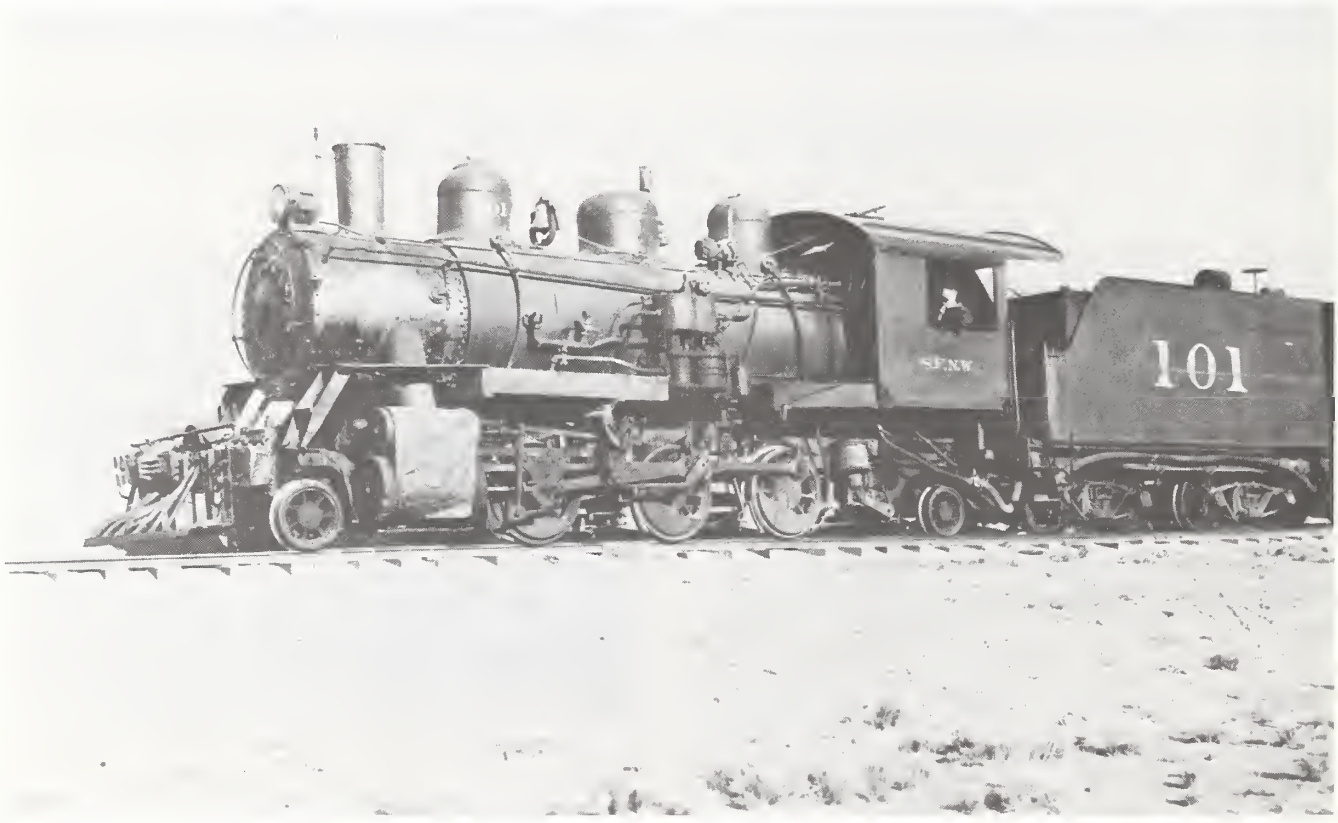

Figure 14. Santa Fe Northwestern locomotive Number 101 at Bernalillo, New Mexico on July 31, 1939. This view shows the conversion from tank type to tender type. Photo by Robert M. Hanft.

section of the train. Doubling eliminated the need for a more powerful locomotive or for a second locomotive on the run. Of course, it was a very time-consuming operation, but time meant little on a logging railroad.

North of Jemez Pueblo there was also a "pretty good little hill," in the words of one of the enginemen. It, too, sometimes required trains to double the grade for a short distance.

The powerful locomotives could easily handle full trains of loaded cars all the way to the mill, which was mostly downgrade in favor of the loads except for a short stretch at the mouth of the Jemez River. This was called the "river hill," and trains could generally make a run at it and pull the train up the short grade.

During the early years, any of the SFNW locomotives were used both on the main line and in the woods. Although the Climax would normally be considered a bit slow for the long haul down the Rio Jemez, it was used regularly on the run between Bernalillo and Deer Creek (Bruce Crow 1961).

During the first two years of SFNW operation, a good many changes took place. The railroad was extended much farther into the timber, additional locomotives and cars were purchased, and a new headquarters logging camp was set up.

During the warmer months of 1925, after winter had left the high country, the railroad was pushed northward from Deer Creek. This time, however, the builder was the White Pine Lumber Company, not the SFNW. At Mile 47.3 a wider part of the canyon was reached where the Rio Cebolla joined the Rio de las Vacas and became the Rio Guadalupe. There was room here to build the logging camp and the railroad facilities (Figure 15) that were needed for a large logging operation.

Figure 15. Railroad and shop facilities of the White Pine Lumber Company at Porter, New Mexico, during the height of logging activity, September 3, 1930. Box car number 701, a gondola (probably full of coal) and a log loader wait on sidings for the next job. USDA Forest Service photo number 249031, by J. D. Jones.

Figure 16. A railroad trestle and dwellings scattered through the woods at Porter, New Mexico, circa 1932. Photo by Don R. Hammond.

Figure 17. Don Hammond and his wife lived in this tiny cabin at Porter, New Mexico, circa 1932. It was located just above the company store which he ran. Photo by Don R. Hammond.

The new camp was called, not surprisingly, Porter; and it became the center of logging activity. It was not long before two or three hundred people lived there, most of them in tiny log cabins scattered through the woods (Figure 16 and 17). There was a rambling company warehouse which included a store (Figure 18) operated by the Porter Mercantile Company. This was a typical "company store" offering the loggers credit and dealing in company tokens as well as in cash. There were no railroad facilities at Porter beyond a wye and several sidings. The legs of the wye crossed the Rio de las Vacas on low timber trestles (Figure 19) (Hammond 1974; Gallagher 1988).

Figure 18. New Mexico Lumber & Timber Company store and warehouse at Porter, New Mexico, circa 1932. Don Hammond was the storekeeper. Motor trucks had become an essential part of the logging activity even this far into the woods. Photo by Don R. Hammond.

Figure 19. Railroad trestle and buildings at Porter, New Mexico, circa 1932. Photo by Don R. Hammond.

The show place of Porter, however, was the residence of the logging superintendent. Called The Lodge, it was an elaborate seven or eight room house boasting a large stone fireplace and chimney. Years later, the fireplace remained on the hillside as the only tangible sign that Porter ever existed. The ravages of weather, scrap dealers, and road builders had combined to remove or obliterate practically all remains of the once busy camp. Even the railroad bed is now difficult to trace (Hammond 1974; 105 ICC 717; Northnagle 1967).

Although most of its traffic was logs for the WPL mill, the SFNW took it upon itself to apply for common carrier status during 1925. One reason was to encourage traffic along the line, especially coal that might be shipped out by the Cuba Extension Railway connection at San Ysidro. Another reason was to protect its hard won right-of-way across the Jemez Pueblo lands. The first application, approved by the Interstate Commerce Commission (ICC) on August 25, 1925, resulted in public carrier status being granted for the line owned by the SFNW extending from Bernalillo to Deer Creek. A second application covering the line leased by the SFNW from WPL between Deer Creek and Porter was approved by the ICC on March 22, 1926. And, in the same action, WPL was granted trackage rights over the SFNW track from Deer Creek south to Box Canyon siding. These actions allowed the operation of SFNW trains all the way up to Porter, and they also permitted the running of WPL log trains anywhere between Box Canyon and Porter (99 ICC 597; 105 ICC 717; ICC 43 Val. Rep. 729).

In spite of the formalities of trackage rights, train operations seemed to ignore the distinctions between the SFNW and WPL. The original two locomotives were used whenever and wherever they were needed on the logging spurs as well as the main line. The next locomotive acquired by the SFNW was Number 103 (Figures 20 and 21), a sturdy 2-8-0 road engine purchased in July, 1926. It had been built in 1911 for the Marion & Rye Valley, a Virginia road. It was quickly followed in early 1927 by Number 104 (Glover 1967).

During 1926 the 104 had been ordered from the Heisler Locomotive Works in Erie, Pennsylvania. Delivered in January 1927, it was a Heisler gear-drive type of modern design and weighing 70 tons. The Heislers were popular at the time with loggers all over the west, and they were powerful and efficient locomotives (Glover 1967).

The first logging spur built by WPL was the Bales Canyon "high line" (Figure 22) which ran generally westward from Porter. It started up the Rio de las Vacas. A little over a half mile

Figure 20. Santa Fe Northwestern Railway locomotive Number 103 is on a log train at O'Neil Landing, circa 1937 - 1941. This sturdy locomotive served the line throughout its existence. The headlight, pilot, and tender seen in this view are AT&SF standard designs. It is an indication that they had been replaced while the locomotive was on the SFNW. Photo by Yale Weinstein.

north of Porter, it switched back to the west with big looping curves to gain elevation. A woods camp called La Cueva was reached in about three and a half miles, and short spurs ran up canyons to the north and northwest. The Bales Canyon line was built during 1926 and was used until 1928. After that year it was little used, although the tracks remained in place until about 1933 (Hammond 1974; Curnutte 1987).

The expanded railroad required more rolling stock as well as the additional locomotives. Ten more log cars were purchased to supplement the initial 20. At least some of these cars appear to have been steel cars from the Sierra Madre Land & Lumber Company located in old Mexico. A collection of ordinary freight cars was acquired to carry supplies for the loggers and for use in the maintenance of the railroad. There was a single water tank car, five flat cars, two gondolas, one box car, and two dump cars. Two cabooses provided shelter for the train crews and passengers on the long journey to Bernalillo. Although the railroad's cars were nominally available for use by the public, there is only scant evidence that a very few ever took advantage of those cars. Most of the SFNW cars were used for company business, such as bringing supplies up to Porter and for maintenance work along the line. The upkeep of the roadbed, for example, required the constant renewal of embankments and ballast, as well as the ditching out of cuts and side hills (Official Railway Equipment Register [January] 1926; July 1930).

The SFNW built and used what it called rail-autos (Figures 23 and 24). There were a number of these vehicles in use on the tracks throughout the railroad's lifetime. The earliest versions were Ford Model T conversions. The front wheels and axles were replaced with a light four-wheel truck on a pivot, and the rear wheels were simply replaced with flanged wheels gauged for the railroad. With a top speed of about 20 miles per hour and no steering mechanism, the autos tended to last a long time (Gallagher 1988).

In order to solidify its financing, WPL hired Thomas and Meservey of Portland, Oregon, to make a timber cruise or survey of the timber on the grant. The cruise recorded 527,830,000 board feet of merchantable timber, practically all "California white pine" as Ponderosa pine was termed in those days. The timber was valued on the company's books at $1,847,405.00, which reflected a valuation of $3.50 per thousand board feet (Price, Waterhouse & Co. 1926).

The WPL was able to sell its bonds during the first half of 1926, by which time the company had established its markets and had accumulated some profits. The bonds were 6.5 percent first mortgage gold bonds with a face value of $1,250,000. The underwriter was the Detroit Trust Company, which immediately obtained a mortgage on the entire property (American Lumberman 1926 [June 12]).

By the time of the bond sale, the sawmill at Bernalillo had been expanded into a two-band and resaw mill with additional processing facilities in the form of a lath mill, planning mill, and box factory. An interesting feature of the plant was its contract to sell mill refuse -- sawdust,

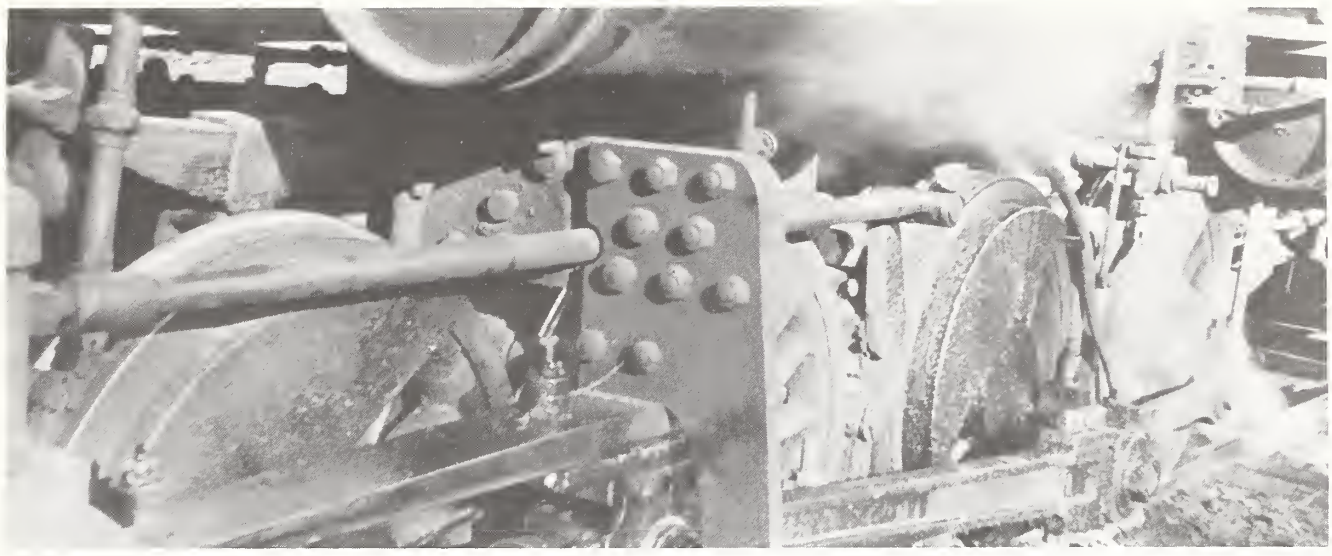

Figure 21. Details of SFNW locomotive No. 103, circa 1937 - 1941. Below the cylindrical air brake reservoir can be seen the drive wheels and main rod which actually drove the locomotive. The long rod on the left is the valve actuating rod, controlling steam admission to the cylinders. Photo by Yale Weinstein.

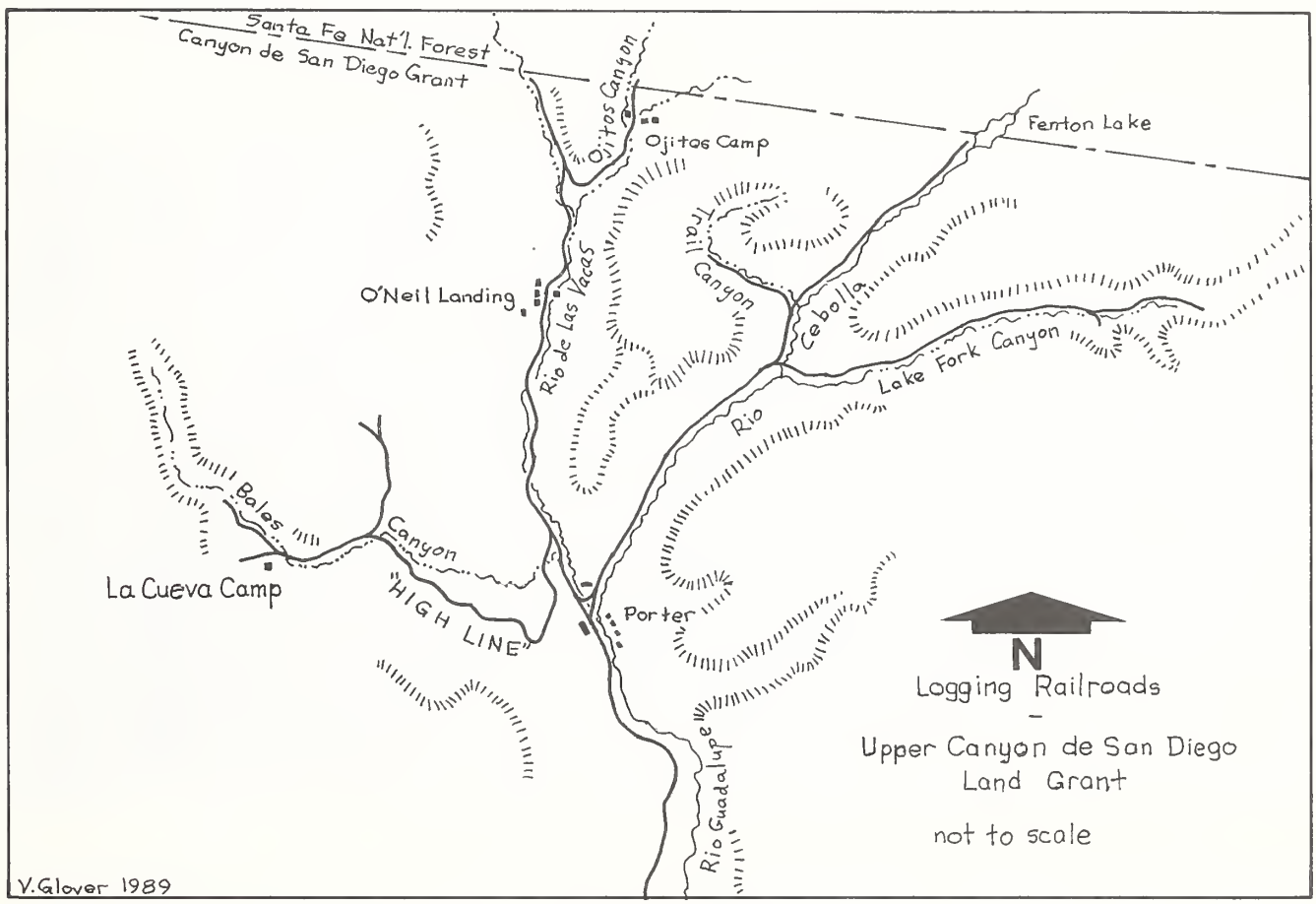

Figure 22. The logging railroads (darker lines) in the upper canyon of the Cañon de San Diego Land Grant. Most of the area shown is now administered by the Santa Fe National Forest.

Figure 23. Santa Fe Northwestern Railway Number 2, a simple rail-auto conversion of a Buick coupe. Note the light sheet steel fabrication of the rear wheels. This particular vehicle was called the "Doctor's coupe," for its primary function was to provide transportation to the logging camps for the company doctor. The rail-auto is seen here during October, 1930, on its way to La Ventana over the Santa Fe, San Juan & Northern Railroad. T. P. Gallagher, Jr. collection.

Figure 24. One of the more elaborate rail-autos, probably at Porter circa 1932. This four-door sedan was modified with a light four-wheel truck in place of the front wheels and steering gear, and stamped-steel railroad wheels on the rear axle. The ride was hard, but the convenience of such a vehicle was a necessity during the winter months when snow and mud blocked what few roads there were. T. P. Gallagher, Jr., collection.

Figure 25. The log pond and a string of log cars waiting to be unloaded at the Bernalillo sawmill, circa 1927. Photo by A. L. "Red" Gleason. Gene Harty family collection.

chips, and slabs -- to the Albuquerque Gas & Electric Company for use as fuel in their power plant. Reported at the time as a "unique situation," the arrangement relieved WPL from bearing the expense of operating a waste burner while at the same time providing a significant source of revenue. Prominent features of the plant included a 12-acre mill pond (Figure 25) and a tall spindly water tank which towered over the plant. It is still an outstanding landmark of Bernalillo (American Lumberman 1926 [June 12]).

Employing hundreds of workers in the woods and in the mill, WPL and its railroad had become an integral part of the community. The SFNW became known locally as el Chileline, a title no doubt borrowed from the familiar narrow gauge line of the Denver & Rio Grande Western running north from Santa Fe (Viva al Pasado 1976].

It appears that WPL established its markets primarily in the east -- principally in Kansas and Missouri -- because the mill at Bernalillo was conveniently located on the main line of the AT&SF; and because Sidney Weil had earlier negotiated a $5.00 per thousand board feet reduction in the freight rates over that line for lumber shipped east of Belen, New Mexico. This put WPL into a competitive position relative to lumber from east Texas (Weil 1960; American Lumberman 1926 [June 12]).

It was in July, 1926, that George E. Breece sold his interest in WPL to Guy Porter. Breece was building a new logging railroad in the Zuni Mountains at that time, and he may have needed the money to complete that expansion (Glover 1986; Albuquerque Journal-Evening Edition 1926 [July 9]).

Traffic volume was slow to build up on the SFNW. In 1926, the first year for which information is available, originating traffic amounted to only 46,218 tons. In terms of carloads of thirty tons, this was equal to 1,541 cars or roughly thirty cars per week. That was the equivalent of two log trains a week throughout the year. Traffic originated during 1927 more than tripled, reaching to 143,540 tons or the equivalent of five or six trainloads per week. Certainly, the additional locomotives purchases during 1926 helped to handle the increase (ICC Statistics 1926, 1927).

Hard Times

The busy times of 1927 were soon destined to end. On December 31, 1927, the Climax locomotive Number 102 blew up on the High Line not far above Porter. Engineer Lewis Crow received a broken leg, broken arm, several broken ribs and other

injuries. Lorenzo Deering, the fireman, was scalded severely enough to require hospitalization.

A few days later Lyman Porter and Red Gleason, the Master Mechanic of the SFNW, escorted an insurance inspector to the site of the explosion to determine the cause. The party rode the rails on a Fairmont motor car driven by young Boyd Curnutte. Curnutte (Figure 26) was told to stand away from the wrecked locomotive so he wouldn't hear anything of the discussion concerning the explosion.

The Climax locomotive had come from West Virginia and was said to be in poor repair when it arrived. The crew of Number 102 had generally taken water from line-side streams, which had been muddy during the previous month. During the Christmas shutdown, the boiler had been drained but not washed out, leaving any mud and sludge in it. When the engine was fired up again after Christmas, the boiler was filled once more with muddy water, and the engine went back to work. The cause of the explosion was said to have been a hot spot on a firebox wall caused by the sludge (Lewis Crow 1960; Curnutte 1987; Albuquerque Journal 1928 [January 2]).

The loss of the locomotive was to be of less importance than might have been expected. By September 1928 the lumber market had deteriorated to the point where logging and milling operations were shut down completely. For a variety of reasons -- declining revenues, lack of operating capital, and a physical plant deteriorating from lack of upkeep -- the company remained shut down until new financing could be found. (Albuquerque Journal 1928 [January 2]; Albuquerque Tribune 1930 [February 11]).

Figure 26. Boyd Curnutte, mechanic (left) and Don Curnutte, logging superintendent at the truck repair shop. They were photographed at O'Neil Landing, circa 1939. The Curnuttes worked many different jobs in the woods. Occasionally, when a train crew was not available, Don would go down to Porter, fire up the locomotive, and bring the log train up to O'Neil Landing. Photo by Yale Weinstein.

Reorganization

It was not until 1930, following fifteen months of idleness, that the logging operation was revived. In the meantime, the SFNW reported little or no originated tonnage, although several hundred cars of coal originating at La Ventana were handled from San Ysidro to Bernalillo (193 ICC 545).

The WPL was in serious financial trouble by this time, having little revenue out of which to pay the interest due on the first mortgage bonds issued back in 1926, as well as a serious shortage of operating capital to see it through periods of little income. Salvation arrived in the form of a new investor who was willing to pay the interest and assume other accumulated debts in return for a substantial interest in the company.

The new investor was Abram Isaac Kaplan, a successful New York businessman who had been involved in hotels, real estate, fleets of ocean-going tankers, and molasses importation and distribution. Sidney Weil had earlier persuaded Kaplan to provide some of the money needed to complete the Cuba Extension Railway (by then called the Santa Fe Northern). Kaplan had come into contact with the WPL owners during earlier negotiations over a trackage right contract.

Subsequently, Kaplan invested a large amount in the WPL company (Gallagher interview).

By an agreement, dated September 11, 1929, Kaplan and his associates acquired a controlling interest in the company. Altogether their investment, which was represented by various forms of notes and securities, amounted to $1,173,025.00. Of this sum, $180,521.30 was used to refurbish the SFNW (Gallagher interview; Linder, Burk and Stephenson 1932 [March 19]).

One of Kaplan's associates was Thomas Patrick Gallagher who moved from New York to New Mexico in 1929. He had worked with Kaplan, and held stock in most of his enterprises. Gallagher quickly assumed a prominent role in the day to day operations of the lumber company. It was soon apparent that between them Kaplan and Gallagher had effectively bought out the Porter and McCorkle interests in the WPL. The stock market crash in October 1929 wiped out the eastern holdings of Kaplan and Gallagher, leaving them with the New Mexico properties as their principal remaining asset (Gallagher interview: 193 ICC 545).

A number of steamship captains and engineers from the Kaplan and Gallagher shipping lines followed them to New Mexico. Jesse F. Bird was a ship's captain who invested some money in the WPL company. In 1929 he became woods superintendent for WPL, but he returned to ships and the sea in 1932. William H. Gilman was another steamship employee who traveled west; he became Vice President (Operations) of the SFNW before his death in 1931. Box Canyon station was renamed Gilman at that time. The railroad operating point at the summit of the "river hill" near the Rio Grande was named Casey for Captain Vincent Casey who stayed a few years in New Mexico and then returned to the sea.

In all, five captains or engineers from the shipping lines followed Kaplan to the New Mexico mountains. Most returned to the sea after a time. Authur J. Sine, on the other hand, was invited into the company because of his extensive sales experience (Gallagher interview).

The revitalized WPL started off with considerable vigor. Some 150 men were put to work in the woods cutting timber (Figure 27), while a force of 50 overhauled the sawmill and railroad equipment. New sawmill machinery was installed, and in the woods six Model 60 Caterpillar tractors (Figure 28) replaced many of the horses

Figure 27. Bucking a felled tree into logs twenty-feet long for skidding, circa 1932. The chain saw had yet to make its appearance. From the collection of T. P. Gallagher, Jr.

Figure 28. Two caterpillar tractors skidding a log across soft ground circa 1932. The railroad landing can be seen at the edge of the valley in the left background. From the collection of T. P. Gallagher, Jr.

Figure 29. This power shovel on a tracked chassis was used for road building circa 1932. The use of power machinery greatly speeded the work of transporting logs from the woods. From the collection of T. P. Gallagher, Jr.

used to skid logs. A track-mounted steam shovel (Figure 29) was purchased to prepare roadbeds for rail spurs and "Cat" haulage roads (Linder, Burk and Stephenson 1932 [March 19]; Albuquerque Journal 1930 [January 18, January 27 and February 12]).

Lack of repairs during the shutdown had resulted in considerable deterioration of the SFNW track, roadbed and rolling stock. The railroad had to be repaired and its equipment refurbished before log shipments to the mill could be resumed. The roadbed had been damaged by washouts (Figure 30), requiring the reconstruction of 14 bridges along the line. About 110,000 cross ties were replaced to renew the track. Three locomotives were purchased, and the freight car fleet was refurbished and expanded (Linder, Burk and Stephenson 1932).

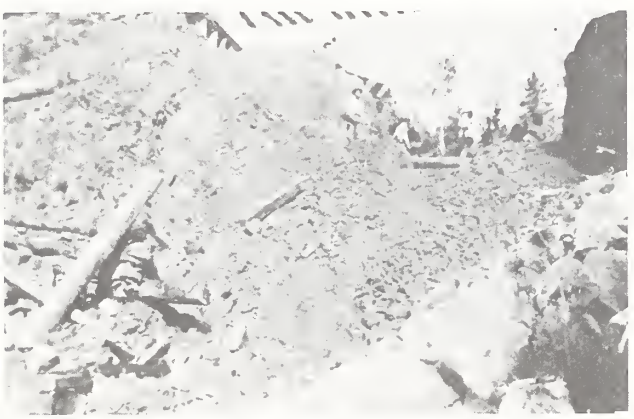

Figure 30. A large washout of a timber trestle circa 1932. Nearly the entire structure has disappeared, leaving the track swinging across the gully. From the collection of T. P. Gallagher.

During this same period of renewed activity, WPL was the successful bidder on an immense tract of timber offered by the Forest Service for sale north of the Cañon de San Diego Grant. The sale in the Rio de las Vacas watershed involved an estimated 207,900,000 board feet of timber, covering about 40,000 acres of land or more than 60 square miles of forested country. The lumber company's bid was $2.00 per thousand board feet, which was the minimum offer permissible. This figure was well below the $3.50 per thousand board feet to which Sidney Weil had objected years before, and it appears to have been in line with his ideas on the subject. In other words, the Forest Service had followed Weil's desires on a contract negotiated over a decade after he had first expressed them (New Mexican 1930 [September 6]; Albuquerque Journal-Evening Edition 1931 [July 27]; Price Waterhouse & Co. 1931).

To the lumber company's dismay, the sale was opposed in the press at Santa Fe, the state capital. The "New Mexican" embarked on an extended editorial campaign against the sale, contending in several articles and editorials that long term logging operations would damage the scenic beauty of the mountains and destroy the hunting, fishing, and tourist trade of the district. The Forest Service itself came to the rescue, when Forest Supervisor Frank Andrews noted that the timber sale was being made pursuant to the old agreements upon which the construction of the sawmill and railroad had been originally based. The Forest Service went ahead with the sale, which was completed on September 3, 1930. It was, however, to be some time before logging began in the area (Alamogordo News 1930 [September 11]; New Mexican 1930 [July 22, September 6 and September 11]; Price Waterhouse & Co. 1931 [April 2]).

In the meantime, the first log train came down from the mountains on January 12, 1930; it was only the first of many needed to fill the mill pond before sawing could begin once more. When the mill opened on February 12, 1930, over three million board feet of timber were floating on the pond. Five hundred men were employed by WPL at that time, half in the woods and half at the mill. The mill began sawing at the rate of 175,000 board feet per ten hour shift (Albuquerque Journal 1930 [January 18]).

The SFNW was hard pressed to keep up with the demand for timber. More rolling stock was ordered, and it arrived as the demand for timber increased. Late in 1929 orders were placed for thirty additional log cars and a second new Heisler locomotive. In addition, the railroad's old freight cars were rebuilt, and additional cars purchased.

The Heisler, Number 105 (Figure 31), was an 80-ton version of Number 104 with many modern details, such as pressure oil lubrication to all the drive gears. Number 105 arrived during February, 1930, and went right to work. About the same time, the SFNW bought two ancient Pittsburgh ten-wheelers (4-6-0 type) from the AT&SF. Numbered 106 and 107 (Figures 32 and 33), the two old-timers were mostly used for switching

Figure 31. Santa Fe Northwestern locomotive Number 105 in the sawmill yards at Bernalillo, New Mexico circa 1933. This was the second Heisler geared locomotive on the railroad. It weighed about 80 tons, and all twelve wheels were driven by a line shaft centered under the locomotive. Photo by Charlie Pratt.

Figure 32. Locomotive Number 106 of the Santa Fe Northwestern Railway behind the engine house at Bernalillo, New Mexico on May 25, 1933. Photo by Gerald M. Best.

Figure 33. Number 107 of the Santa Fe Northwestern Railway at Bernalillo, New Mexico. By this time, the locomotive had been converted to oil fuel and an oil tank was installed in the former coal space of its tender. Photo by Robert M. Hanft made July 31, 1939.

Figure 34. Locomotive Number 101 of the Santa Fe Northwestern Railway at Bernalillo, New Mexico, circa 1946 - 1950. Clearly seen are the weights added along the running boards to improve traction and the heavily rebuilt tender with its added water capacity. Photo by Bert H. Ward.

at the mill and for handling coal and stock trains between San Ysidro and Bernalillo (Pratt 1960; New Mexico Railroader 1960 [October]).

As if the three additional locomotives were not enough, the SFNW rebuilt the Porter 2-6-2T Number 101 from a woods engine to a road engine capable of making the run from Bernalillo to Porter. The changes, superintended by Master Mechanic Charles Pratt, involved removing the side water tanks, the cab, and the rear fuel tank. In their places went a "new" steel cab obtained from the AT&SF and the tender from Number 103. This tender was built up to increase both its fuel and water capacity. In turn, Number 103 was converted to oil fuel and received a tender bought from the AT&SF.

Once returned to service, Number 101 proved to be a slippery runner because weight on the drive wheels was sacrificed when the side tanks were removed. The problem was partly solved by the addition of some ballast weight (Figure 34) in the form of old rails and concrete along the running boards (Pratt 1960; New Mexico Railroader 1960 [October]).

The old railroad shops had been poorly equipped with machine tools to perform the necessary routine work on the locomotives. Additional equipment and machinery was installed at Bernalillo, and a new locomotive repair shop was built at Porter. There had previously been no railroad facilities whatsoever at Porter. The shop consisted of a cavernous locomotive shed and a number of machine tools. The boiler from the old Dooley locomotive provided power for the machines (Linder, Burke and Stephenson 1932 [March 19]; Curnutte 1987).

During this period, the road locomotives were Number 101 and Number 103. With their larger tenders, these two locomotives could make the round trip from Bernalillo to Porter and back with a minimum number of stops for fuel and water. Each could pull about 30 empty log cars (Figure 35) from Bernalillo to the Box Canyon siding, where about half the train would be left

Figure 35. Train of empty log cars climbing up the grade near Canyon, New Mexico, about 1927. Photo by A. L. "Red" Gleason; Gene Harty family collection.

on the siding. For the remainder of the run up to Porter, Number 101 could handle 15 or 16 cars, and Number 103 could pull 12 to 14 cars. Heisler Number 105 could take 22 cars up the line if they were warm from running; otherwise, 18 empties were all it could pull (Pratt 1960).

The two Heisler locomotives were the woods lokeys and were normally stationed at Porter. They worked the logging spurs and made trips down the main line to pick up empties at Box Canyon. In addition, they made regular trips down to Bernalillo for maintenance and for the mandatory Interstate Commerce Commission inspections.

All of the SFNW locomotives, even those used almost exclusively in the woods, such as Heisler Number 104, were inspected and certified under the ICC regulations. This permitted them to operate on the upper portions of the SFNW in the vicinity of the tunnels (Pratt 1960).

The SFNW freight car fleet was rebuilt and greatly expanded during the general rehabilitation of the railroad. The company now owned 65 log cars, most of them of steel construction. The other types of cars were rebuilt and renumbered. The freight car roster numbered 86 cars when all the changes were complete (see Table 2).

In addition to its own log cars, the SFNW made increasing use of log cars leased from the AF&SF. These were from the group of Class Ft-G steel flat cars built during 1905. The cars were sturdy 40-foot long cars of 40 tons capacity. Many had been equipped from the start with log bunks, and were used initially in log hauling service between Thoreau, New Mexico, and Albuquerque. Over the years these cars found their way into logging service out of Williams, Arizona, and on the SFNW (Pratt 1960; Official Railway Equipment Register 1931 [June]).

Shortly after the mill reopened, an extension to the WPL logging railroad was begun. The track was pushed northeast up the valley of the Rio Cebolla about 7.5 miles to a point beyond Fenton Lake. And, in quick succession, a short spur was laid 7,000 feet up Trail Canyon; and a longer branch was built up the Lake Fork canyon. The Lake Fork branch ended about two miles south of State Highway 126. These lines were very lightly built and ran generally on the floors of open valleys. They served truck and Cat logging in most of the northern half of the Grant (Bruce Crow 1960; Hammond 1974).

On October 12, 1930, the SFNW issued a curious, and, so far as can be determined, unique document in the form of "Employees' Timetable Number 1." It regulated the joint operations of the SFNW and the Santa Fe, San Juan & Northern Railroad, the latter being the Cuba Extension Railway as reorganized and refinanced by Kaplan. The document provided a number of insights into the operations of the SFNW.

Among many other things, this timetable defined normal running times for trains. The running time for the 38.3 miles from Bernalillo to Box Canyon was 3 hours and 16 minutes northbound, and 3 hours and 29 minutes southbound. For the steep nine miles from Box Canyon to Porter, running times were 1 hour and 10 minutes northward, and 1 hour and 29 minutes southward. Locomotive fuel was available at Bernalillo and Porter, while water could be taken on at Bernalillo, San

Table 2. Santa Fe Northwestern Railway Rolling Stock, June 1931

Car Type	Car Numbers	Quantity
Water	100	1
Log, wood frame	200 - 219	20
Log, steel	220 - 239	20
Log, steel	240 - 265	25
Flat	500 - 506	6
Gondola	600 - 604	5
Box	700 - 704	5
Dump	800	1
Caboose	50, 51, 52	3
	Total	86

(Source: Official Railway Equipment Register, June 1931)

Ysidro, Box Canyon, and Porter. Wye tracks for turning locomotives were located only at Bernalillo, Box Canyon, and Porter. The time-table (Table 3) also gave the bell codes for the company telephone system connecting the sawmill offices with San Ysidro and Porter (SFNW/SFSJ&N 1930).

The SFNW worked harder than ever during 1930. A total of 158,632 tons of freight were originated, almost all of them in the form of saw logs for the mill. This total indicates that the 30 car log trains were run three or four days of the week. This pace held up until the mill was shut down without notice on March 15, 1931, reportedly because of low lumber prices (ICC Statistics 1930, 1931; Albuquerque Journal-Evening Edition 1931 [April 22]).

New Mexico Lumber and Timber Company

It was not long after the mill shut down until the company's largest investor, Abram I. Kaplan, became concerned for the safety of his investment. As a result, he petitioned the District Court to appoint a receiver to oversee the company's operations and finances. His request was quickly granted on April 21, 1931.

The Court's decision to appoint Jethro S. Vaught and E. J. Cox as receivers of WPL also opened the company's debt structure to public view (Albuquerque Journal-Evening Edition 1931 [April 22]; Linder, Burke and Stephenson 1932 [March 19]). The debts included the following:

(1) Kaplan represented to the court that that he was an unsecured creditor for $955,000, of which $755,000 was covered by notes or debentures of the company, and $200,000 was covered by a demand note on WPL. Unpaid interest in the amount of $56,986 was due on the debentures, and $18,500 on the demand note.

(2) The fixed assets of the SFNW, owned by WPL, were under mortgage to secure a bond issue in the face value of $1,200,000, of which $930,000 was outstanding with an $80,000 payment of interest and principal due before June 1, 1931.

(3) Other debts of WPL included unpaid taxes in the amount of $27,599, and accounts payable of $138,819.

Events moved rapidly during 1931. There were apparently a number of lumbermen, including George E. Breece, ready and willing to help pay its accumulated debts in return for an interest in the company. The District Court ordered that WPL be sold at auction on July 27, 1931; and the sale proceeded as scheduled. Only one bid was received in the amount of $1,200,000. This sum was acceptable to the Court; and on August 20, 1931, the assets and obligations of WPL were duly transferred to a new corporation, the New Mexico Lumber and Timber Company (NML&T). The directors of the new company included George E. Breece, T. P. Gallagher, A. J. Sine, and Jesse F. Bird (Albuquerque Journal - Evening Edition 1931 [July 27]: Albuquerque Journal 1931 [September 10]).

Breece and Gallagher were by far the largest investors, and they occupied the chief executive positions. At this point, Kaplan became the

Table 3. Telephone Rings for New Mexico Timber Company

"OFFICE CALLS"

Bernalillo	Supt. Office	Three Long Rings
Bernalillo	Gate Man	Two Long Rings
Bernalillo	Main Office	One Long Ring
Bernalillo	Doctor and Time Keeper	Three Short Rings
San Ysidro		One Short, One Long, and One Short
Porter		One Short, One Long

Dr. Robert F. Hogsett	Three Short, Co. Phone
Dr. Robert F. Hogsett	1328-R Albuquerque
W. H. Gilman	37 Bernalillo
W. E. Rose	1926-W Albuquerque

Table 4. Officers of the New Mexico Lumber and Timber Company.

Officer	Title	Residence
George E. Breece	Chairman of the Board	Albuquerque
T. P. Gallagher	President	Bernalillo
J. F. Bird	Vice-President	Bernalillo
A. J. Sine	Secretary and Treasurer	Bernalillo
J. S. Hinton	Auditor	Bernalillo
W. A. Keleher	General Counsel	Albuquerque
A. Larsson	Freight Traffic Manager	San Francisco, Calif.
W. E. Rose	Superintendent	Albuquerque

(Official Railway Equipment Register July 1935).

silent partner, backing Gallagher. During the next few years, the officers and officials of the company were as shown in Table 4.

Breece's involvement was significant because of his expertise in marketing lumber as well as in managing a big logging operation. A. J. Sine was a Chicago lumber wholesaler who invested in the New Mexico company to assure his supply of lumber. By the same token, his investment also assured NML&T of a customer in the mid-West. It was a good deal all around (Gallagher interview).

For their money, the new investors received an impressive property -- lands, a modern mill plant, and a railroad -- in which the previous owners had invested an estimated four million dollars. Still outstanding were liabilities which included $955,000 owed to Kaplan, $930,000 worth of first mortgage bonds, and a host of lesser debts. Among the latter was the sum of $12,896.97 due on the almost new Heisler locomotive Number 105. Assets included the sawmill plant, the SFNW railroad, the entire Cañon de San Diego Grant, substantial timber rights in the Santa Fe National Forest, and about eleven million board feet of unsold cut lumber and timber (Broudy 1983; Albuquerque Journal - Evening Edition 1931 [April 22, July 27 and July 29]).

Included among the company's debts was a sum owed to the AT&SF for lease of the rail on which the SFNW ran. The lumber company had apparently run behind on the payments during its period of reorganization. Following extended negotiations lasting throughout most of 1932, NML&T agreed to pay the AT&SF the sum of $120,000 over an eight year period to liquidate their indebtedness and to acquire title to the rail and fastenings covered under the leases. This arrangement was agreed to by the AT&SF in recognition of the economic conditions facing the lumber industry as well as the fact that the rail was not worth much more than the cost of its recovery (AT&SF Ry. 1932 [December 28 and 29]).

Sometime during the period of Kaplan's ownership, the SFNW lifted some 8,667 track feet, about 1.6 miles worth, of rail and fastenings from the Santa Fe, San Juan & Northern which was also owned by Kaplan. Presumably this rail was used to complete one of the logging spurs of the SFNW. Originally leased by the AT&SF to the long defunct Cuba Extension Railway, this rail was added to the SFNW lease of AT&SF rail (W. B. Storey 1932 [December 28 and December 29]; S. T. Bledsoe 1934 [April 27]).

Lumbering resumed after the sale of WPL and the formation of NML&T, and regular log trains once more came down the SFNW tracks. For a time, only the planing mill at Bernalillo was operated, and the logs went down to the mill of the George E. Breece Lumber Company on the north side of Albuquerque. This mill customarily received its logs from the Breece lands far to the west in the Zuni Mountains. Later in 1931, the Bernalillo sawmill resumed sawing logs (Albuquerque Journal 1931 [September 10]).

The 1931 reorganization of NML&T was essentially financial in nature. The bondholders reduced the interest rate on the outstanding bonds. Payments on other forms of indebtedness were reduced as well, lessening the burden on the company in a time of decreasing business. During the preceding period, both T. P. Gallagher and A. I. Kaplan made further substantial contributions to NML&T in a successful effort to keep the company alive. The next few years were a struggle, but lumbering operations continued in the mountains.

Figure 36. The sawmill at Bernalillo, looking north, about 1931. Along the left side can be seen the railroad coaling chute (lower left), the planing mill and loading tracks (center), and the railroad wye track (upper left). In the center of the view is the sawmill. The railroad shops are below and left of the sawmill. The millpond contained several groups of logs separated by booms, and the railroad log car unloading track ran along the straight left side of the pond. Lumber drying stacks were located to the north of the sawmill. From the collection of T. P. Gallagher, Jr.

After a time Breece and Kaplan were at odds over running the business. Ultimately Sine, holding the pivotal stock, allied himself with the Gallagher and Kaplan interests, and they were able to buy out Breece's interest in the company (Gallagher interview).

The next several years were a time of frequent and often extended shutdowns of logging and milling. Market conditions were very poor to begin with, and they were extremely competitive as well. All of the southwestern lumber companies had greatly over-expanded, and there was a lot of timber for sale as a result (Figure 36). Railroad operations over the SFNW had resumed by 1932, and they continued into 1933 at a moderate pace. Log trains were shorter and ran less frequently then, but railroad operations during 1934 and 1935 appear to have been conducted at an even lower level (ICC statistics 1932, 1933, 1934 and 1935; Albuquerque Journal 1933 [March 14]).

The old logging spur lines were taken up as timber was depleted west of Porter. The Bales Canyon "High Line" and the track up the Rio Cebolla were little used after 1933, and the rail from these lines was used in new track constructed during 1934. One new line ran north from Porter along the Rio de las Vacas to a point about a mile beyond the grant boundary, presumably to gain rail access to some of the timber on the Santa Fe National Forest. The northern end of this line was said to have seen

little use (Hammond 1974; Bruce Crow 1960).

The railroad crossed the river several times on log trestles using unusually long spans over the water. These trestles consisted of four log stringers, typically about 32 feet in length, set on large square timbers laid perpendicular to the track. Crossties were spiked directly to the stringers (Figure 37).

During 1934, some distance to the south, a spur was built into Virgin Canyon to gain access to timber on the high mesas of the east side of the grant. This line was a short, very steep piece of railroad in a rugged and rocky canyon. The Virgin Canyon spur began at a wye and siding installed at Mile 37 of the SFNW, and it extended three or four miles up the canyon, ending at a landing where logs were loaded after being brought down a zig-zag road from the mesa above.

The spur was built on a very steep grade, described as being as much as 12 percent, which made train operation very difficult. Don Curnutte was the regular engineer on the branch, and one of the two Heislers was the normal motive power. One day during the spring of 1936, rod locomotive Number 101 made a trip on the spur. It ran away down the steepest part of the grade. Before reaching the main line, it turned over on a curve. Although not heavily damaged, the locomotive had to be righted using a massive block and tackle secured to nearby trees. After the runaway, it is said some work was done on the roadbed to reduce the grade (Hammond 1974; Curnutte 1987).

During the Depression, traffic volume was extremely variable, at least as reported to the ICC. Traffic originated was 107,626 tons during 1932, and 98,474 tons during 1933. These figures included shipments of crossties to the AT&SF, which was an important customer for such timber. The big road discontinued the purchase of ties

Figure 37. The railroad trestles along the Rio de las Vacas north of Porter were characterized by long log stringers and cribwork supports. Most were very low and vulnerable to washouts. This view shows such a bridge in November, 1968, some 27 years after abandonment of the railroad. Photo by Vernon J. Glover.

during 1935 and 1936, which was a blow to the lumber company. The ICC reported no traffic data for 1934 nor for 1935, but this information is not wholly consistent with other sources. Business evidently continued at a very slow pace during those years, with small but regular shipments of finished lumber products leaving Bernalillo over the AT&SF (ICC Statistics 1932, 1933, 1934 and 1935).

The SFNW and its owner, NML&T, were unable to continue with the semi-annual $7,500 payments to the AT&SF for the lease on the SFNW rail. In the course of working out a plan to reorganize the NML&T in 1935, a lump sum payment of $30,000 cash for all the rail was negotiated with the AT&SF. With the acceptance of this final payment by the AT&SF Executive Committee on June 25, 1935, the SFNW at last became the owner of its own rail (AT&SF Exec. 1935 [June 19 and June 25]).

The Final Years

Business improved during 1936, and many changes occurred in the company's operations. The Lake Fork and Virgin Canyon spurs were pulled up during 1936, and a new spur line was constructed during 1936 from a point on the track extending along the Rio de las Vacas. It switched back and climbed up the side of the canyon until it could curve into Ojitos Canyon (Figure 38). A short distance beyond, a logging camp was set up and named Ojitos Camp.

Figure 38. The spur railroad from the Rio de las Vacas into Ojitos Canyon climbed on a steep sidehill grade. When the line was abandoned, the ties were left in place. Photo made in November, 1968 by Vernon J. Glover.

Figure 39. The New Mexico Lumber and Timber Company camp in Ojitos Canyon. The railroad landing with stacked logs is in the left background in the notch where Ojitos Canyon opens into the canyon of Rio de las Vacas. Photo made by Robert Salton, August, 1936. USDA Forest Service photo 333137.

Ojitos Camp (Figure 39) was built by George White. Most of the buildings were small and built on skids so they could be easily moved. There were about 25 cabins for families and a cookhouse capable of feeding 40 men. A log barn, which can still be seen, housed the horses used for logging. When the log barn was converted to a truck shop, another barn was built nearby. Its remains can also still be seen today. Tommie Goodman and his wife Annie ran the small commissary and lived nearby in a log house. The railroad spur ran through the camp (Figure 40), past a truck reload, and on for a short distance north and east up the North Fork of Ojitos Canyon. The Ojitos Canyon tracks remained in place until 1939 (Hammond 1974; Goodman 1977; Weinstein 1984).

Business was good enough so that in 1936 NML&T bought the timber rights to the Baca Location, customarily called the Valle Grande, some distance northeast of their existing holdings. The plan was to log the estimated 400 million board feet of timber in conjunction with nearby stumpage in the Santa Fe National Forest. Good roads on a downhill water grade permitted efficient truck haulage (Figures 41 and 42) of this timber via the state highway through Jemez Springs to a reload point or landing on the SFNW at Canyon (Forest Pioneer 1936 [2nd Quarter]; Curnutte 1987).

The initial logging on the Baca Location took place north of Redondo Peak in an area called the Redondo Border. NML&T preferred cutting on the private land to the highly regulated logging on the Santa Fe National Forest. After the Baca Location purchase they logged only the minimum required on the National Forest, 2 million board feet a year (Curnutte 1987).

During the summer of 1936, Gallagher and his associates acquired George E. Breece's holdings in NML&T, and he accordingly resigned from its board of directors. These actions ended Breece's involvement with lumbering in the Jemez Mountains.

Traffic on the SFNW remained healthy throughout 1936 and 1937 with 20 or more loads of logs being sent down to Bernalillo each day. The truck logging on the Baca Location and in the Santa Fe National Forest resulted in the SFNW being more of a line-haul operation than a conventional

Figure 40. Ojitos camp circa 1937 - 1939. Living quarters are in the left foreground, railroad spur running across, and the truck shop is center right to the rear. Photo by Yale Weinstein.

Figure 41. Trucks replaced horses for logging during the 1930s. This early rig was coming down a canyon to the railroad landing on a well-built roadway. From the collection of T. P. Gallagher, Jr.

Figure 42. A detailed view of one of the early log trucks, circa 1932. In most respects, this rig shows the same design features -- articulated trailer, dual tires, and wide log bunks -- that characterized later and heavier trucks. Provisions for the drivers safety and comfort, however, left something to be desired. From the collection of T. P. Gallagher, Jr.

logging railroad. Landings or reload points were established at several sites. Logs were unloaded from trucks and reloaded on rail cars at O'Neil Landing, Ojitos Camp, Joaquin Canyon, Virgin Canyon, and Canyon Landing. During this period the SFNW ceased to use its older wooden log cars in favor of steel log cars rented from the AT&SF. This not only avoided the high maintenance costs associated with the wooden cars, but it also made available a larger quantity of cars when needed (ICC Statistics 1936; Hammond 1987; Weinstein 1987).

The heavy log trains, even when they ran every day, provided neither fast nor convenient transportation to the logging camp residents. The loggers and their families, the commissary, company store, and the repair shops frequently had needs for materials and supplies. And the log trains were of little use in bringing the company doctor to the aid of injured loggers. The company's rail autos (Figure 43 - also see page 22) filled the need for this sort of service. During this period the SFNW used a Packard sedan, converted to rail use in the same manner as the older Ford Model T cars. The Packard was powerful and well built and served the purpose very well. In addition to the services mentioned, the Packard carried the mail when the trains didn't run (Gallagher interview; Bruce Crow interview).

Disaster struck the SFNW and its locomotives once more on August 16, 1936. Heisler Number 104 and its two man crew had just brought some logs down from Ojitos Camp and stopped on level track along the Rio de las Vacas. Engineer Albert Hays was in the cab, and fireman Carleton Miller was under the locomotive making a minor repair when the firebox crown sheet failed, causing the locomotive to be enveloped by superheated steam and blowing the boiler over 100 feet up the track. Both men were seriously burned, and Hays suffered a fractured skull as well. Miller recovered, but Hays was permanently disabled and later successfully sued the company for substantial compensation (Albuquerque Journal 1936 [August 17]; 1938 [February 17]).

The locomotive was a total loss. The cause of

Figure 43. A "rail-auto" as it was termed on the Santa Fe Northwestern Railway, posed on a tall trestle circa 1932. This construction was typical of the railroad line along the Rio Guadalupe between the Box and Porter. This trestle was of typical railroad design except for the use of long logs as stringers under the ties instead of the usual milled timbers. Photo from the collection of T. P. Gallagher, Jr.

Figure 44. American Hoist and Derrick diesel loader at O'Neil Landing in the summer of 1939. The loader is moving a set of rails into position on the next log car in preparation for its movement to that car. The long carriage of the loader with its wheels can be clearly seen. The log car on the left is one of a group of old steel cars purchased in 1930 from the Ferrocarril Nor Oeste de Mexico. Photo by Yale Weinstein.

the explosion was never specifically determined, but all evidence indicated that low water in the boiler led to the crown sheet failure. The low water may have come about as the result of a plugged water gauge glass, which gave a false indication of the water level in the boiler above the fire box. The engineer was deceived into believing there was enough water in the boiler when, in fact, there was not (Pratt 1960).

The company made further changes in its operations during 1937. The old camp at Porter was abandoned in favor of a new camp called O'Neil Landing (Figure 44 - also, see Appendix B). It was named after Grover Cleveland O'Neil, the contemporary logging superintendent. The company store and commissary were moved to Bernalillo, but the remaining dwellings and shop buildings were set up at the new site. A new small railroad shop was built as well. In preparation for a major change in its operations, the SFNW applied to the ICC for permission to "abandon" its common carrier operations between Mile 37, the Virgin Canyon siding, and Porter. Permission was quickly granted on September 10, 1937, but it did not mean the end of rail operations at all (221 ICC 759; Weinstein 1987 and 1989; New Mexico Railroader 1960 [October]).

In this case, the term "abandonment" meant that the railroad from Virgin Canyon to Porter was no longer a common carrier or public railroad, and that it was no longer under the jurisdiction of the ICC. This relieved the SFNW of the expensive chores attendant to regular locomotive inspections and frequent reporting of operations for the line affected. As a practical matter, this move took all of the logging railroad operations out of ICC jurisdiction. The railroad itself remained in full operation, but with the status of a private carrier. Locomotive Number 105, the remaining Heisler, was immediately relettered

"N. M. L. & T. Co." in place of "S. F. N. W." and was sent up to O'Neil Landing (Figure 45). It is believed that the SFNW did not turn its entire route into a private plant facility railroad at this time because there was reason to believe that the title to the right-of-way through Jemez Pueblo might be adversely affected (Weinstein 1987; Pratt 1960).

Train operations assumed a new pattern. Now the "hill engine," usually Number 105, would routinely take trains of logs down to the Virgin Canyon siding, exchange loads for empties, and return to O'Neil Landing. The "town engine," either Number 101 or Number 103 took the loads down to Bernalillo and returned with a train of empty cars the next day. By this time the Virgin Canyon spur line had been taken up, but the wye remained in place to turn the locomotives around for their return journeys after the loaded and empty trains were exchanged (Pratt 1960; Bruce Crow 1960).

Traffic over the SFNW remained at a high level throughout 1937, with 151,682 tons having been originated. In 1938, however, the freight originated dropped to 102,668 tons, and in 1939 the amount decreased even further to 73,853 tons (ICC Statistics 1937, 1938 and 1939).

In addition to its sales of ordinary construction lumber, NML&T in 1937 began supplying small sizes of lumber to a specialty market. White Wood Products Corporation, an affiliated company, used 250,000 board feet of pine annually in the manufacture of wash-boards, ironing boards, mop handles, brush tops, and similar products. Because it did not splinter or "rise" when soaked with water, ponderosa pine was an ideal wood for these items. The production of wash-boards at Bernalillo, about 500 dozen a day, employed 60 to 80 men. These specialty products turned what had been waste wood into saleable merchandise. Over the long run, however, there proved to be plenty of established competition in these wood products lines (Forest Pioneer 1937 [1st Qtr]; Gallagher interview).

The drop in traffic during 1938 and 1939 was caused, at least in part, by labor difficulties. During 1937 there had been a series of wage reductions and layoffs by NMT both in the woods and at the Bernalillo sawmill. The effects seemed to be felt most severely by the mill workers in town, and as a result a labor union organizing effort began. On March 1, 1938, the 200 NML&T employees at the Bernalillo sawmill voted to strike for a wage increase of ten cents an hour. At that time it was estimated that the

Figure 45. Heisler locomotive Number 105 at Bernalillo, in 1941. At this time the locomotive had been transferred to the New Mexico Lumber & Timber Company and was used only on logging spurs beyond the jurisdiction of the Interstate Commerce Commission. Behind the locomotive may be seen two of the Santa Fe Northwestern's cabooses, both of which were former AT&SF cars. Photo by Charlie Pratt.

average wage was at the mill was about 24 cents an hour. With very irregular hours being worked at the mill, however, full-time employees earned from $3.67 to $13.00 every two weeks during that period. In addition to the low wages, the mill hands worked only at the pleasure of the lumber company. An injured employee was laid off and left without any pay. The working day was still ten hours; and this was during a time of improving working conditions.

According to some observers, the company did not take the strike all that seriously. On March 2, 1938, the President of NML&T, T. P. Gallagher, announced that there would be no wage increase. As the strike continued, the strikers became more and more embittered toward the company, which began bringing in strikebreakers from Cuba and Las Vegas, New Mexico. A few episodes of violence occurred, and the State Police were called in to patrol the streets of Bernalillo. Cooler heads quickly prevailed, and negotiations began on March 17, 1938, with Governor Clyde Tingley acting as mediator. Before long, a settlement was reached which greatly improved conditions for the ordinary mill workers. On March 29, 1938, the strike ended, and the mill workers went back to work.

Labor difficulties erupted once more during contract negotiations in late October 1938. Once more a strike vote was called, and the mill workers left their jobs on November 3, 1938. It was not until November 11 that new contracts were signed and the mill reopened. Although the company's attempts to reduce operating costs were often viewed as "union busting" tactics, the railroad tonnage reported for 1939 reflected a very poor year for the company in terms of timber production (Kern 1983; Viva al Pasado 1976).

During this period NML&T began logging west of Deer Creek landing, not too far north of the tunnels. This was an area of exceptionally fine pine timber which found a ready market (Curnutte 1987).

One night, during the autumn of 1939, the Joaquin Canyon trestle burned to the ground. This three-story framed timber trestle was one of the largest structures on the entire railroad, and there was no way to bypass it. The very night it

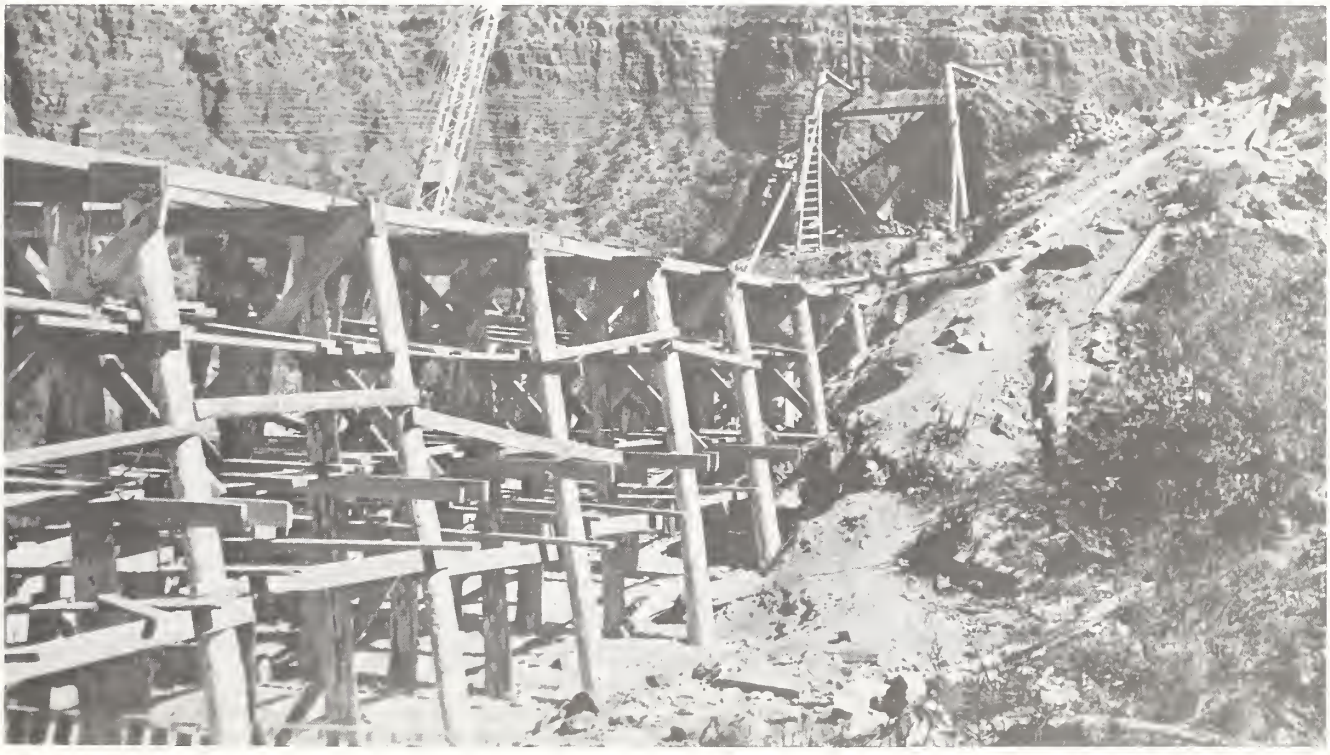

Figure 46. After a fire in the autumn of 1939, the Joaquin Canyon trestle was quickly rebuilt. Round piles were driven in the ground, braced and capped off, ready for the next story of pre-assembled bents to be placed. The rigging for raising the bents into place is seen at the right. Photo by Yale Weinstein.

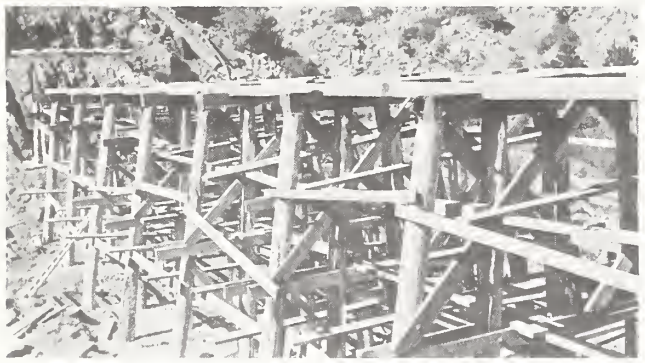

Figure 47. Details of typical railroad trestle construction are seen in this view of the Joaquin Canyon bridge. The vertical piles carried the load and the many braces, both lateral and longitudinal, provided stability under the moving loads of heavy trains. Photo by Yale Weinstein.

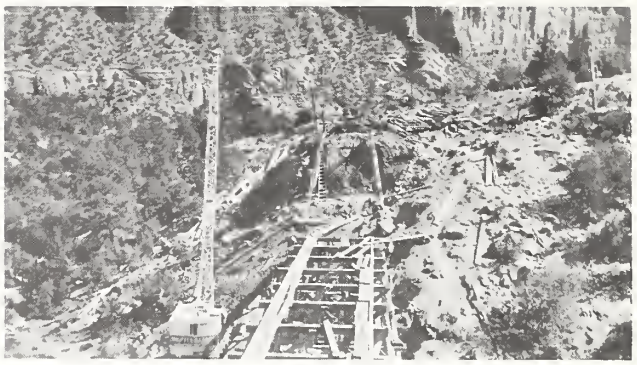

Figure 48. View from the track approach to the Joaquin Canyon trestle construction in the autumn of 1939. The track level on the opposite side of the canyon is seen above the hoist posts at the far end of the trestle. Riprap protects the embankment. Photo by Yale Weinstein.

burned, construction foreman Nick Babich grabbed his flashlight and took a crew out to start cutting logs for a new trestle. Within a matter of days the new bridge was going up (Figures 46 through 48), a testimonial to the skill and dedication of the SFNW work crews (Weinstein 1987).

Business began to recover during 1940, and the SFNW originated 143,235 tons of freight during the year. Much of the increased demand for lumber came from the new military bases being built all around the country. Their construction demanded immense amounts of lumber. NML&T used its own trucks to deliver the lumber to new air bases at Albuquerque and Hobbs, New Mexico, and Fort Bliss, Texas (Curnutte 1987; ICC Statistics 1940).

Heisler locomotive Number 105, the mainstay of the mountain section of the railroad, was completely overhauled during 1938 or 1939. It had been in continual hard use since its purchase. The overhaul may have been prompted by its blowing a cylinder head while pulling a heavy train through the Guadalupe Box.

The SFNW continued to operate on its regular routine until the first week of May, 1941, when unusually heavy rains fell throughout the Jemez country. The rivers and streams flowed in torrents, eating away at their banks and the sandy, unprotected railroad bed. Before the rain ceased, major damage had been done in the area. Many fields and pastures had been destroyed, seriously damaging the crops for that season.

The railroad itself was washed out in innumberable places. Several bridges were damaged, and three miles of track were washed away (249 ICC 342; Albuquerque Journal 1941 [May 10]).

Rebuilding the railroad was estimated to cost $90,000, no small sum in those days. The company gave a lot of thought to its decision, for it had recently invested much in the maintenance of the track and in the rebuilding of Number 105. Nevertheless, the decision was made to abandon the railroad and to continue using heavy trucks for log haulage. With several years experience in the use of heavy trucks on long hauls in the woods, NML&T found it easy to extend their runs to Bernalillo, bypassing the railroad altogether. Accordingly, the SFNW applied to the ICC on September 4, 1941, for permission to abandon the entire railroad with the exception of 1.2 miles of track connecting the sawmill with the AT&SF tracks at Bernalillo. In view of the lack of real common carrier traffic over the SFNW, the ICC swiftly granted its permission on October 28, 1941 (249 ICC 342).

Dismantling the SFNW was accomplished quickly. Wartime demands for scrap steel and usable locomotives provided a ready market for the property. The rails and rolling stock of the SFNW were sold on an "as-is, where-is" basis to the Hyman Michaels Company of Chicago, and the rail and fastenings were pulled up before the end of 1941. Heisler Number 105, then still in excellent condition, was sold to Southwest Lumber Mills at McNary, Arizona. The locomotive ran throughout the war years around McNary and

Flagstaff before being sold for scrap. The old ten-wheeler Number 107 ended up as a stationary steam boiler at a California manufacturing plant. Number 101 remained at Bernalillo as the mill switcher until it was replaced around 1946 by a small gasoline-powered locomotive (Figure 49) acquired from the U. S. Army. Then, Number 101 was cut up for scrap (Glover 1967; Gallagher 1988).

The Army locomotive was purchased by Thomas P. Gallagher, Jr., then running the company, at a sealed bid auction of government surplus property. His bid of $101.11 was only 11 cents above that of the next highest bidder. The original gasoline engine on the locomotive proved to "burn an oil well's worth of fuel," and it was soon fitted with a diesel prime mover (Gallagher 1988).

Logging continued much as before. Trucks carried the logs over the state highway through Jemez Springs to the Bernalillo plant. The New Mexico Timber Company, owned by T. P. Gallagher, had succeeded NML&T. When it came time to log the northern reaches of the Baca Location, a new roadway was needed for the log trucks' long haul. The route finally chosen was one following the old railroad up through the Guadalupe Box, up along the Lake Fork and on east on a good grade to the northern portion of the Baca Location.

The railroad bed from Box Canyon northward was converted into a truck haul road. The bed was widened, and double-width "sidings" were graded at regular intervals. These were necessary because large trucks with extra-wide log bunks were used on the private logging roads. The sidings were named using military radio jargon --

Figure 49. New Mexico Timber Company's last railroad locomotive at Bernalillo, September 16, 1964. This twenty-ton unit was used to switch cars of lumber from the mill to the AT&SF connection. Photo by Henry R. Bender, Jr.

Able, Baker, Charlie, Dog, etc. -- and the trucks were dispatched from point to point using two-way radios. The truck haul eventually extended far beyond the length of the SFNW, going many miles into the Baca Location (Glover 1967; Northnagle 1967).

About 1948 a new sawmill was built at Gilman (Figure 50), located in the loop of the road just below the Box tunnels. The sawmill at Bernalillo was closed, but the planing mill remained in operation. By the 1960s huge Kenworth diesel trucks, bearing the names Monarch, Hercules, Invader, Lodestar, Jumbo, and Klondike, were in use. The truck haul continued until about 1973, when logging in the Santa Fe National Forest by NML&T ended. The long use of the Guadalupe Box railroad bed as a heavy haulage road amply confirmed its value as a gateway to the high country of the Jemez (Albuquerque Tribune 1973 [January 16]).

As logging on the Cañon de San Diego Grant came to a close, consideration was given to disposing of the property. Efforts were made to develop vacation properties around Jemez Springs; but the bulk of the grant was deeded to the Forest Service on July 22, 1965 and incorporated into the Santa Fe National Forest. Subsequently, public access was provided through the Guadalupe Box tunnels. The tunnels were repaired, the old log cribbing was replaced with concrete panels, and the roadway was paved for automobiles. The old railroad route continued as the main access to the immense canyon country of the Cañon de San Diego Grant (Figure 51).

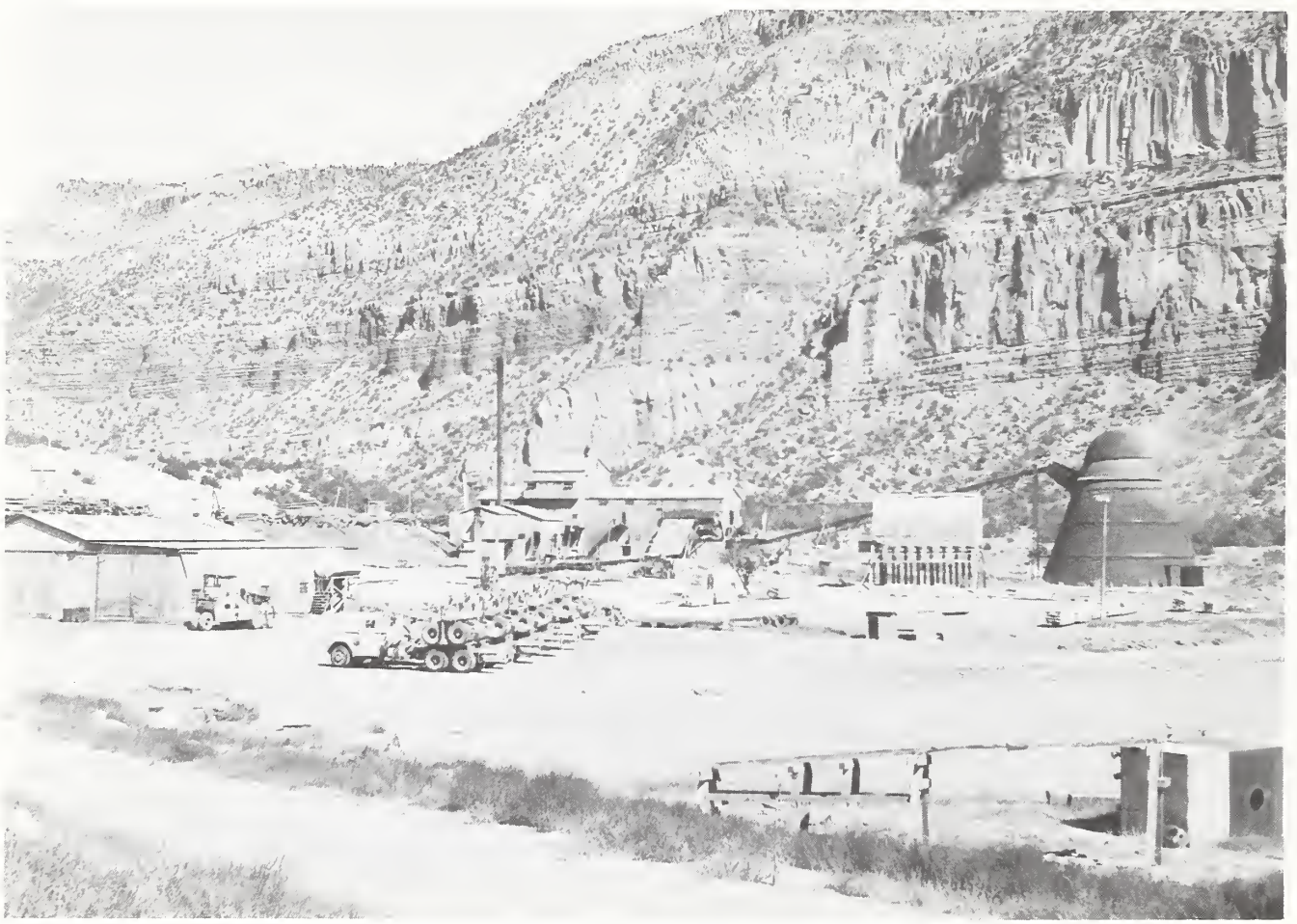

Figure 50. The New Mexico Timber Company sawmill at Gilman, New Mexico in November, 1968. This mill was located below the box, and it was served by trucks operating on the old railroad roadbed. The big trucks with oversized log bunks were lined up at the mill on this day off. Photo by Vernon J. Glover.

Figure 51. A fully loaded Mack log truck emerges from the Guadalupe Box tunnels sometime in the 1950s. These trucks carried extra-wide log bunks and operated on private roads between the Baca Location and the Gilman sawmill. The old railroad tunnels had been enlarged to accommodate the trucks by this time. Photo from the Yale Weinstein collection.

CUBA EXTENSION RAILWAY

Today La Ventana is little more than a rest stop on New Mexico Highway 44 between San Ysidro and Cuba. Ventana is Spanish for window; and just to the east of the highway are high red rock cliffs, one of which contained the window that gave the area its name. Further east are the timbered Sierra Nacimientos which form the horizon, while to the west is a country of open mesas and broad, deeply eroded valleys. Just off the highway is a cluster of low stone buildings, only one or two of them still habitable. They were once the center of the lively coal camp of La Ventana, a would-be village with a remarkably short life as an industrial center.

Careful observers of La Ventana will see many signs of its earlier life: veins of coal in the nearby sandstone cliffs, lengths of cinder-strewn railroad beds, and some weed-grown dumps of slack coal (Figure 52). Hidden from the view of travelers on the paved highway lie several coal mines. These are marked by the remains of mine tram cars, tumble-down shanties, and one or two sturdy timber mine tipples. La Ventana was once a place of activity and promise; now only a few can remember its very existence.

The coal at La Ventana had been used to fire the boilers and the smelting furnaces of the copper mines located a few miles to the northeast in the foothills of the Sierra Nacimiento. Records indicate that most of the copper production there occurred between 1880 and 1900, though there was a brief revival in 1919 and 1920. The chief producing copper mines in the district were the San Miguel, the Copper Glance, and the Eureka. For a time in the 1880s, a small smelter of 25 tons-per-day capacity operated at the village of Copper City near Senorita. It appears that in addition to the copper, the ores also contained a substantial amount of silver as well. Unfortunately, the broken and scattered nature of the deposits, as well as the absence of rail transportation, seems to have halted any extensive development of the district (Elston 1967).

Cuba Extension Railway

The coal and copper deposits along the west side of the Sierra Nacimientos were among the destinations listed by Sidney Weil in his prospectus for the Santa Fe Northwestern Railway when he incorporated it in August 1920. As previously recounted, the SFNW never reached the La Ventana district because it became the railroad arm of the White Pine Lumber Company and ran instead into the heart of the mountains. By 1923 Weil was completely out of the affairs of the SFNW; and he then returned to promoting a rail line to La Ventana and beyond to Cuba, an established agricultural village about 12 miles north of La Ventana (Albuquerque Morning Journal 1920 [August 12]).

During July, 1923, Weil announced the incorporation of the Cuba Extension Railway Company, along with his plans to begin construction during the next month. The line was to be 44 miles in length, and its cost was expected to exceed $700,000. The actual incorporation of the Cuba Extension took place on August 11, 1923. The authorized capital stock of the company was $650,000, of which only $4,400 had been paid in. The incorporators were the same Albuquerque businessmen who had incorporated the original SFNW: Sidney Weil, Ivan Grunsfeld, Guy L. Rogers, J. E. Cox, and Lloyd Sturges.

Later announcements concerning the Cuba Extension made frequent references to continuing the

Figure 52. Roadbed of Santa Fe, San Juan & Northern Railroad at Mile Post 28.5, near La Ventana, New Mexico, circa 1959. [The SFSJ&N was the Cuba Extension Railway as reorganized by Kaplan.] Photo by Vernon J. Glover.

railroad beyond La Ventana and Cuba to the town of Farmington. The developing oil and gas fields there would provide very large revenues to any railroad extending into that area (Albuquerque Morning Journal 1923 [July 22 and August 12]).

Several months passed before the Cuba Extension was heard from again. In the meantime, Weil had evidently made a deal with Matthews and Eggleston, the contractors then doing much of the grading work on the SFNW. They put a crew to work on the Cuba Extension in early 1924, and by March 6th had completed 20 miles of light grade north from San Ysidro and 5 miles south from La Ventana. In later years it was learned that Matthews & Eggleston had expended $75,443.89 in doing this work. It was also learned that they had not been paid (Albuquerque Morning Journal, 1924 [March 1 and March 6]; Albuquerque Journal - Evening Edition 1931 [May 26]).

Figure 53. Inspecting a washout along the Santa Fe, San Juan & Northern Railroad line to La Ventana in October, 1930. The track has been supported by a cribbing of crossties where the trestle bents have been washed away. Photo from the collection of T. P. Gallagher, Jr.

The route followed the Rio Salado for a few miles west and north from San Ysidro, then crossed a low divide into the valley of the Rio Puerco. The railroad grade ran along the east side of the valley, crossing innumerable dry washes which ran with torrents of flood water whenever the snow melted or rain fell in the mountains. The country along the railroad was arid and sandy with a thin growth of grass and mesquite. The ground was easily graded, but it was just as easily washed out after a mountain storm (Figure 53).

There was little in the way of settlement or agriculture along the route except near San Ysidro and Cuba. A few cattle grazed on the sparse grass, and that was all. The population along the entire length of the railroad, a distance of over 40 miles, was estimated at 1,970 people. The railroad as surveyed was not a difficult one, involving maximum grades of only 1.50 percent northbound and 1.25 percent southbound. But without the concurrent development of new industries, such as mining or lumbering, there would be practically nothing for the new railroad to carry (154 ICC 473).

At the same time as the railroad was being graded, some efforts were being made to develop the coal deposits near La Ventana. J. P. Hoye of Trinidad, Colorado, began work on several prospects, forming the Sandoval Coal Company to operate them. One of the more promising deposits, located in Section 19 of Township 19 N., Range 1 W., became known as the Hoye Mine. A two-compartment shaft was sunk to a depth of 75 feet. No production was recorded, however, because of the very poor quality of the coal found (Albuquerque Morning Journal 1924 [March 1]; USGS Bulletin 860-C).

Very little more was heard of the Cuba Extension Railway during the next two years. No track was laid, and no coal was shipped out of La Ventana. Exploration work continued on the coal outcroppings, however; and during 1925, the San Juan Coal & Coke Company developed the Cleary Mine Figure 54) in Section 31, Township 19 N., Range 1 W. The main entry was through an inclined tunnel which followed the six-foot-thick vein of coal. A boiler, a hoist house, and a tipple were built on the surface. Rope haulage was used to pull

the loaded coal cars up the incline. Only a few hundred tons of coal were removed during the mine development, and no commercial coal production was recorded during 1925 and 1926. But the San Juan Coal & Coke Company was to play an important role in the future of the railroad (Dane 1936).

Figure 54. Foundations of the tipple at the opening of Cleary Mine at La Ventana, New Mexico; October 27, 1973. Photo by Vernon J. Glover.

Sidney Weil and his Albuquerque allies had few resources with which to build the Cuba Extension. In the AT&SF, however, they had an important ally, one easily capable of aiding, or even building, the projected railroad. Weil must have exercised all of his powers of persuasion to draw the AT&SF management into his plans. And he was very successful. During January 1926, locating engineer D. M. Bunker, on leave from the AT&SF, began the final survey of the Cuba Extension Railway from La Ventana to a point near Farmington. This survey work continued for several months using a 14 man crew to run lines and calculate cross sections of the final location of the railroad (New Mexico State Tribune 1926 [January 28]; Albuquerque Herald 1926 [February 15]).

Of greater immediate significance was the aid given to the construction of the Cuba Extension. On March 10, 1926, the AT&SF contracted to provide the Cuba Extension Railway with all the track and bridge materials needed for the entire railroad. The material was to be leased at the going rate until it could be purchased. The transaction was to be completed on or before March 1, 1928 (AT&SF Ry 1926 Contract).

The materials contract prepared by the AT&SF was very detailed; and it provided a thorough description of the railroad as it was planned, and, to all indications, as it was actually built. The AT&SF agreed to deliver to Bernalillo, New Mexico, the following track and bridge materials:

- 4,714 tons of second hand 75-pound per yard rail at $30.40 per ton valuation
- 14,080 second hand Weber rail joints at $30.90 per ton valuation
- 35,000 tie plates
- 14,080 new fillers
- 1,335 kegs of spikes
- 500 kegs of track bolts
- 3,314 bridge ties
- 21 track turnouts

In addition, the AT&SF was to provide local pine ties and bridge timbers purchased from an individual along the line, who was to make delivery directly to the Cuba Extension:

- 34,256 linear feet of trestle piling
- 237,498 board feet of native pine bridge timber
- 81,610 board feet of native pine box culvert timber
- 60,000 each native pine track ties

(AT&SF Ry Contract 1926).

Track laying apparently began late in March 1926, after the rails and other materials started to arrive at Bernalillo. Building even a light-duty railroad such as the Cuba Extension was no small task. Some 146 carloads of material were delivered to the line at San Ysidro during the spring and summer of 1926. In addition, the ties and timbers were sawed locally. To produce them a small sawmill was set up by Lew Caldwell in lower San Juan Canyon of the Nacimientos to cut the special timbers and ties.

The laying of the track proceeded slowly. By June 11, 1926, only two miles of main tracks (as well as the sidings for material storage) had been laid. Nevertheless, Weil announced that

seven crews were hard at work on the line. Work under way included finishing of rock cuts between Mile 10 and Mile 17, and completion of the "small amount of earthworks remaining." Bridging materials were on hand, and the first bridge at Mile 7 was being made ready for the track layers. Weil stated that the trains would be running by September.

Reports later in the year indicated that the track reached a point three miles south of La Ventana by September, 1926, but that an additional three miles of grading was needed to complete the railroad (Albuquerque Journal 1926 [April 6]; Albuquerque Herald 1926 [June 11]; Albuquerque Journal - Evening Edition 1926 [September 20]; Albuquerque Tribune 1973 [February 24]).

Even with the aid of the AT&SF, completion of the Cuba Extension was not a sure thing. Notwithstanding the missing three miles of roadbed, Weil was still able to scrape up some cash. This he used to complete the roadbed and lay the missing three miles of track. But it took several months to do so. On January 31, 1927, it was announced that the First Savings Bank & Trust Company had opened a line of credit for Weil, secured by a first mortgage on the Cuba Extension Railroad. Very little of this was immediately available in cash, for the entire railroad at that point represented at most an expenditure of about $335,000. And almost all of that was still owed to grading contractors and to the AT&SF for the ties, rail and bridge timbers. Some small amount of cash, however, may have been advanced to Weil for use in completing the railroad (154 ICC 741; Cuba Extension Ry. 1927).

San Juan Basin Railroad

As the Cuba Extension Railway tracks neared La Ventana, Weil made another of his surprise moves. Although he had long been stating that the financing of the Cuba Extension had been arranged, Weil found it necessary in mid-August to incorporate the San Juan Basin Railroad. Capitalized at $4 million, the new line planned to build its railroad from Hahn, a point just north of Albuquerque, to Farmington. The projected 166 mile route passed through San Ysidro and planned to utilized the Cuba Extension tracks. The incorporators of the San Juan Basin Railroad included Ernest R. Hunter, Matt Simon, and Sidney M. Weil. Hunter was a New York investor who was also involved with the Cuba Extension. Following a flurry of initial announcements, little more was heard of the San Juan Basin Railroad (Albuquerque Journal 1926 [August 14]; New Mexico State Tribune 1927 [August 30]).

Santa Fe Northern Railroad

Despite his efforts, months passed before Weil was able to push his track all the way to La Ventana. During the spring and early summer of 1927, however, some progress became apparent. Construction was resumed on the frustrating three-mile gap in the grade below La Ventana; and, finally, the track was completed into La Ventana, as preparations began for a grand railway celebration.

In the meantime, something had happened to the railroad's name. With no particular public notice, the Cuba Extension Railway was transformed into the Santa Fe Northern Railroad through the simple expedient of changing the corporate name. For that matter, no specific reason for the name change became evident. One newspaper account, obviously worded by Weil himself, makes an attempt to associate the Santa Fe Northern with the Santa Fe Northwestern, by referring to the SFN as the "second division" of the other railroad (193 ICC 545; Albuquerque Journal 1927 [June 22, July 8 and November 2]).

During May and early June 1927 a number of special events took place that foreshadowed the completion of the rail line to La Ventana. On May 18 Governor R. C. Dillon and Corporation Commissioner Hugh Williams were treated to a ride on the pilot of a SFNW locomotive over the new railroad. Characterized as an official inspection, the trip reportedly ended three miles south of La Ventana. Grading work was still going on between that point and la Ventana itself (Albuquerque Journal-Evening Edition 1927 [May 19]).

A few weeks later, on June 9, the completion of the track to La Ventana was celebrated when the train pulled into town carrying the "first passenger coach ever operated into the frontier of northern New Mexico." The stage was set for the official celebration a few weeks later (New Mexico State Tribune 1927 [June 10]).

The promised grand celebration of the completion of the track to La Ventana took place on Thursday, July 7, 1927. Governor R. C. Dillon

and a handful of state officials came down by auto from Santa Fe to Bernalillo for the occasion. An eight car special train, it was reported, took them on the SFNW to San Ysidro, and then over the new track of the Santa Fe Northern to La Ventana. The celebration took place at the end of track. As the small crowd looked on, Governor Dillon drove a gold spike to mark the completion of the track. Dillon and Weil posed for an official photo by photographer L. A. Graham. Also on the scene was one of the eastern investors in the road, Ernest R. Hunter. And, then the occasion was capped with a grand barbecue, enjoyed by everyone after their long journey. Newspaper accounts of the event referred to the ceremony as marking the completion of "the second division of the Santa Fe Northern," which would be interpreted as another attempt by Weil to associate his road with the SFNW (Albuquerque Journal 1927 [July 6 and July 8]).

It must have been about this time that Weil, with a little money in his pocket, built an elaborate "hotel" at remote Marion Butte several miles north of the end of track. The elegant hotel building was used for entertaining guests and potential investors in the railroad and mining enterprises. The remote location of the ranch, however, has resulted in it becoming one of the greater mysteries of the Santa Fe Northern project. Marion may have been the projected division point on the railroad, located about halfway between Bernalillo and Farmington. Or it may have simply been another town site promotion (Gallagher 1988).

In spite of good intentions, laying track and driving a "golden spike" were not enough to create a railroad. In fact, there was little more to the Santa Fe Northern than the track itself and a construction shanty or two. Notwithstanding its new name and Weil's persuasive powers, the Santa Fe Northern failed to begin operations. Once the special train had left the Santa Fe Northern's track at San Ysidro, nothing more happened. Months passed, and the railroad lay idle. No trains ran, and no coal was shipped from the mines.

The next chapter in the tale of the Santa Fe Northern began in early October, 1927, when Ernest R. Hunter, one of the eastern stockholders in the line, brought an action in the Federal Court in Santa Fe requesting the appointment of a receiver to manage the affairs of the railroad. On October 10, 1927, W. A. Keleher, a prominent Albuquerque attorney, was appointed as receiver of the Santa Fe Northern. Weil stated in the press that the action was a friendly one and that it would not affect his plans for building the railroad (Weil 1960; Albuquerque Journal-Evening Edition 1927 [October 10]).

Keleher quickly worked to preserve the property and rights of the railroad and its investors. In one action he received the permission of Federal Judge Colin Neblett to issue $21,000 worth of receiver's certificates to pay current expenses of the line. In another move, Keleher brought suit in the name of the Santa Fe Northern against the SFNW to test the alleged trackage rights over the SFNW granted back in June 1922. It was claimed that Guy Porter, who had died in Chicago a year earlier, had agreed to give trackage rights between San Ysidro and Bernalillo to the Santa Fe Northern over the SFNW. The trackage right provision was said to be part of the contract of June 22, 1922, by which Weil turned over his rights to the Santa Fe Northwestern Railway to the White Pine Lumber Company. As it turned out, this issue was overtaken by events later in the year, and was never decided in court (New Mexico State Tribune 1927 [November 3]; Albuquerque Journal-Evening Edition 1928 [January 18]); Albuquerque Journal 1927 [November 2].

As the circumstances of the receivership became better known, another story began to unfold. It appears that Weil, back during 1926, had obtained the money needed to build the railroad from Abram I. Kaplan, the same New York businessman who would bail out the SFNW in the years to come. It seems that Weil had been introduced to Kaplan during one of his trips to Washington or New York. From that time on, Kaplan appears to have been a willing investor in Weil's projects and related businesses. It was later revealed that Kaplan had loaned $206,000 to the Santa Fe Northern for construction purposes and that he received, as security, bonds of the company with the par value of $146,500 as well as stock having a par value of $1,250,000 (154 ICC 742; Weil 1960).

As the receivership progressed, it was learned that construction costs of the railroad had been advanced by numerous individuals and companies, and that there were several potentially conflicting claims against the property of the railroad. One anecdote tells of Sidney Weil obtaining staple foods for his construction crews

on credit at a different Albuquerque grocery store each week. While these claims were being sorted out in court, another of the involved parties began to act.

The San Juan Coal & Coke Company (SJC&C) was ready to ship coal, and they took steps to run the railroad themselves. They had spent more than $50,000 developing their mine and were anxious to begin shipping coal. The coal operators filed a protest with the New Mexico Corporation Commission seeking to compel the Santa Fe Northern to issue rates on coal shipped from La Ventana to points beyond Bernalillo, the terminus of the SFNW. The initial response of the SFN was that the trackage right issue had to be resolved first. Ultimately, the railroad and the SJC&C company began to work together (New Mexico State Tribune 1927 [November 3]).

The first step was to work out an agreement with receiver Keleher, whereby the SJC&C would operate their own trains between La Ventana and San Ysidro. As the Santa Fe Northern had no locomotives or coal cars, this meant that the coal mining firm would have to purchase or lease suitable rolling stock. The AT&SF could be expected to provide suitable coal cars, as it did for all the mines in the area; but SJC&C would have to find its own locomotive.

Next, the SJC&C petitioned the New Mexico State Corporation Commission to determine and publish freight rates for coal shipped from San Ysidro to Bernalillo over the SFNW and to points beyond. A hearing was held, and the Corporation Commission responded on February 9, 1928, with an order providing that existing coal freight rates, which applied equally from Waldo, Hagan, Madrid, or Cerrillos, would also apply from San Ysidro for coal shipped over the SFNW and AT&SF. The order, in effect as of March 9, 1928, placed the La Ventana coal on the same basis, in terms of transportation costs, as other coal mined in that part of central New Mexico (Albuquerque Journal - Evening Edition 1928 [January 28 and February 9]; New Mexico State Tribune 1928 [January 28]).

Figure 55. Site of Luciani Mine near La Ventana, New Mexico, on October 27, 1973. Photo by Vernon J. Glover.

There was still some work to be done on the railroad before the SJC&C could begin to haul out its coal. A spur to the mine had to be built, crossing the Rio Puerco on a timber trestle. This spur ultimately extended about a mile to the west, reaching the Luciani mine (Figure 55) as well as the Cleary mine.

The first SJC&C locomotive was one leased and later purchased from the always helpful AT&SF. It was Number 377, a small outdated ten-wheeler (4-6-0 type) built in 1887 by the Pittsburgh Locomotive Works for the Atlantic & Pacific. Like others of its class, it was working out its final years on branch lines and odd jobs around New Mexico for the AT&SF. Weighing less than 60 tons, the locomotive was powerful enough to move a few coal cars on the SFN.

The second SJC&C locomotive was a newer and heavier ten-wheeler purchased from the New Mexico Midland Railway, a moribund coal hauler in Socorro County, New Mexico. This 75 ton locomotive had been built by the Baldwin Locomotive Works in 1901 for the El Paso & Northeastern. Its ownership passed to the El Paso & Southwestern in 1905, and it became New Mexico Midland Number 2 in 1920. Neither of the two SJC&C locomotives was repainted (Figures 56 and 57), and both carried their previous owners' names and numbers until they were junked (Glover 1967).

The SJC&C began shipping coal to market on March 15, 1928. The locomotive would make two or three trips a week taking between five and ten loaded coal cars to San Ysidro and bringing a string of empties back. Records indicate that the Cleary mine produced 10,500 tons of coal during 1928. Allowing for mine and railroad consumption, this indicates that over 300 carloads were carried over the Santa Fe Northern. And shipments continued on into 1929 at an even greater rate

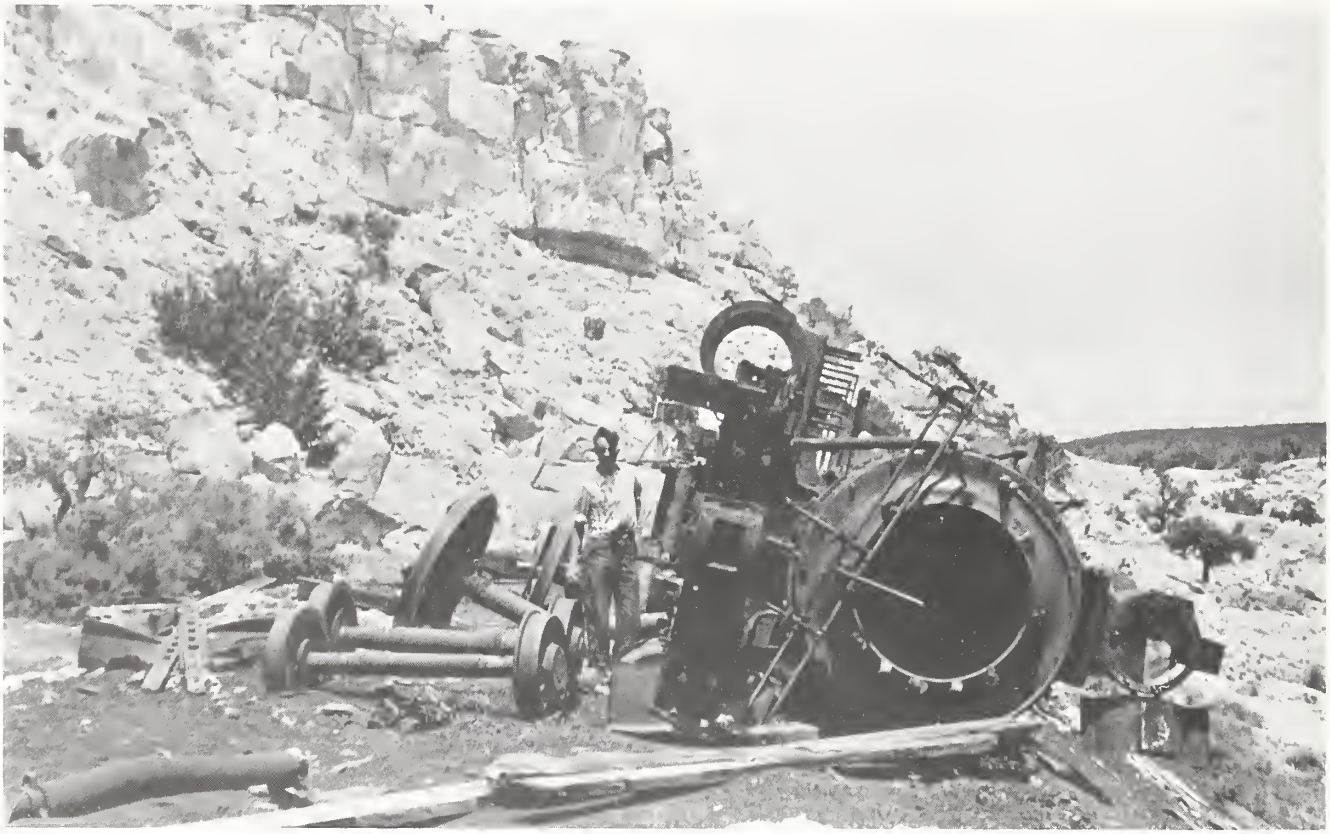

Figure 56. Locomotive Number 377 of the San Juan Coal & Coke Company at La Ventana in the late 1930s. The rails were removed from under the locomotive, and numerous parts had been salvaged.

Figure 57. Locomotive Number 2 of the San Juan Coal & Coke Company at La Ventana, New Mexico, in the late 1930s. The locomotive stood where it was abandoned for several years until it was cut up for steel scrap during World War II. The locomotive still carried the lettering of its previous owner, the New Mexico Midland.

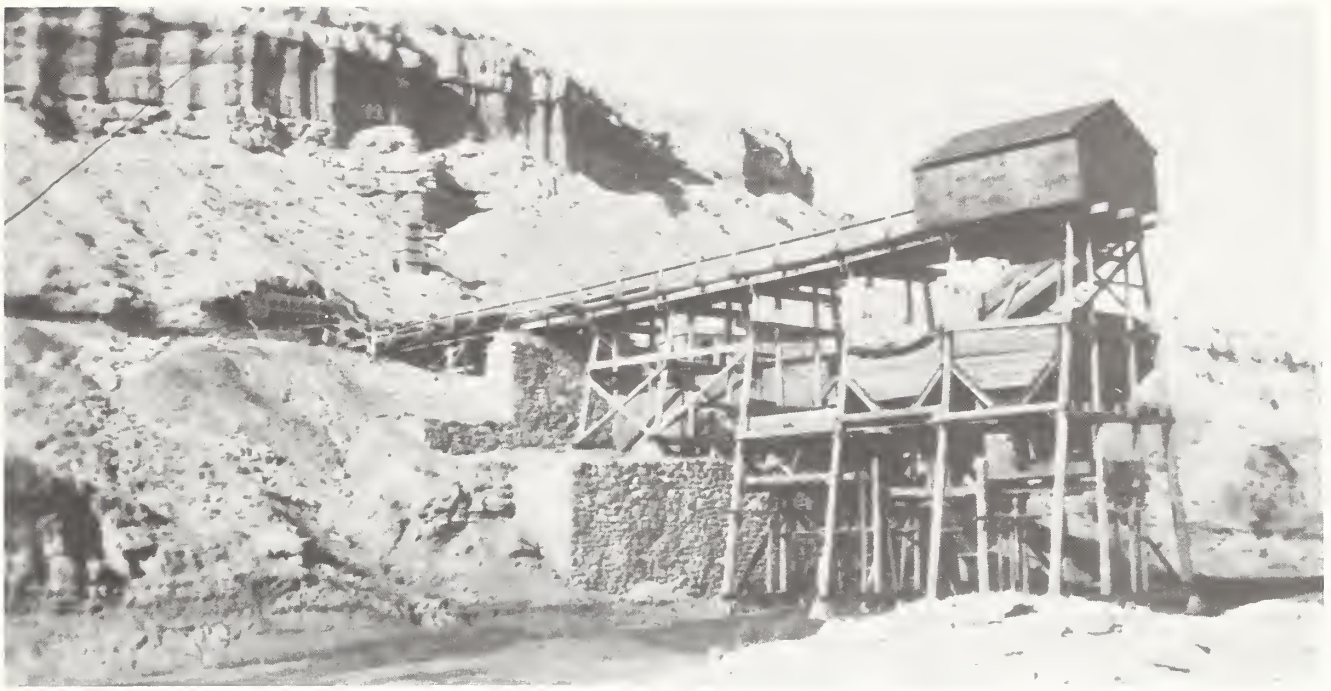

Figure 58. Cleary Mine of the San Juan Coal & Coke Company, circa 1930 - 1932. This mine was the largest producer in the district. Photo by W. G. Pierce; U. S. Department of the Interior, Geological Survey photo.

(Hammond 1974; Dane 1936; Albuquerque Journal 1928 [March 16]).

J. G. Cleary, who ran SJC&C, depended on the SFNW for almost everything connected with his railroad in the way of supplies and maintenance. At one point he got into trouble with the ICC by running a locomotive down to Bernalillo for some work. An ICC locomotive inspector caught the locomotive off of its own line and red-tagged it for numerous discrepancies. This meant that the locomotive could not be operated until the defects had been repaired and the repairs were approved by the inspector.

An interesting contemporary document reveals something about the SJC&C operation. The railroad's only source of water was the SFNW water tank at San Ysidro, which drew water from the Jemez River. After the SJC&C had been running trains for some time, the State Engineer's office required that the railroad apply for water rights, which it did. Their application for the use of 0.25 acre feet was duly approved on November 20, 1928. The application incidentally revealed that Sidney Weil was still a director of the Santa Fe Northern and that V. A. Coffey was Chief Engineer (Santa Fe Northern Railroad 1928 [November 20]).

By this time the settlement of La Ventana had grown into an active little town. Max Baca ran a store, which also housed the post office. The El Nido Hotel, a restaurant, a dance hall, and a pool hall catered to the needs of miners, travelers, and railroaders alike. The stores operated by Fred Maboub and Joe Marchetti completed the commercial section of town. It was said that La Ventana was a "wide open" place, featuring all the usual vices. This could well have been true, for it was a long way from there to the Sheriff's office in Bernalillo (Hammond 1974).

In the meantime, the Santa Fe Northern track had been extended a few miles to the north, reaching Mile 30.3 at a spot called Tilden. Here the track stopped at the site of a construction camp made up of hastily framed buildings. There was just an office, a cook shack, and a bunk house. There were no sidings or other railroad facilities. At La Ventana, however, some construction of spurs serving various coal mines (Figure 58) continued; and the railroad had an office there to accommodate Don Hammond, the timekeeper and station agent (Hammond 1974).

In terms of physical plant, the Santa Fe Northern was about as simple as a railroad could be.

Mostly, it consisted of 30.3 miles of main track with sidings at Salado, Horton, and La Ventana. There were several mine spurs at La Ventana, and there was a single interchange track at San Ysidro. The only water supply available was, as previously noted, the SFNW water tank at San Ysidro. The railroad owned no locomotives, but it did eventually acquire four gondolas and four flat cars. Other property included two motor track maintenance cars, two section houses, two bunk houses, and three frame dwellings. There was, however, no telegraph or telephone line; and railroad business was evidently conducted over the commercial telephone at the SJC&C office (SFNW/SFSJ&N 1930 [October 12]; Santa Fe Northern RR 1928 [October 11]).

It appears that SJC&C continued to haul its own coal for some time, certainly through October, 1929. The Santa Fe Northern remained in receivership while the court made several attempts to sell the property to satisfy its debts. The first sale took place on June 14, 1928; the only bid received was in the amount of $21,000 from the First Mortgage Company in Albuquerque. This was far too little for the value of the property, and the Federal Court rejected the offer. The court, however, did approve the sale of the ranch house and land at Marion Butte to O. N. Marron of Albuquerque for $250 (Albuquerque Journal 1928 [June 14]).

The next sale of the Santa Fe Northern involved a very complex series of actions, and during this period the railroad acquired yet another name.

Santa Fe, San Juan & Northern Railroad

The final sale of the Santa Fe Northern Railroad occurred on September 5, 1928. The only bidder this time was Sidney Weil, acting not for himself, but as agent for Abram Kaplan. He bid $45,000 for the railroad, a sum which proved to be acceptable to the court. The sale was approved on September 26th. Transfer of the property from receiver Keleher to Weil took place on October 11th; and the final transfer from Weil to Kaplan occurred on November 24, 1928. The deeds carefully included the provision that they were subject to the rights of the AT&SF under the contract of March 10, 1926, with the Cuba Extension Railway. This was the contract by which the AT&SF had provided track and bridge materials to build the railroad (154 ICC 473; Santa Fe, San Juan & Northern RR. 1928 [October 11 and November 24]).

Now Kaplan took charge of the railroad; and he initiated the steps necessary to consolidate its operations with those of the SFNW, of which he was also working to gain control. His first move was to obtain trackage rights for the Santa Fe Northern over the SFNW between San Ysidro and Bernalillo. This was accomplished through a contract dated November 28, 1928 between Kaplan and Frank H. Porter, president of the SFNW. Kaplan agreed to pay the SFNW $200,000 for the rights; ten dollars immediately and the remainder on the basis of tonnage actually transported over the SFNW. This contract made Weil's earlier claim of "perpetual" trackage rights between San Ysidro and Bernalillo a moot point (154 ICC 742; SFSJ&N 1928 [Nov. 28]).

The next steps toward reorganizing the railroad took several months to complete; in the meantime, SJC&C continued to run coal trains on its own over the Santa Fe Northern. Kaplan's next action was to incorporate his newly acquired railroad in New Mexico. This was accomplished on December 9, 1928; and the railroad was thereafter known as the Santa Fe, San Juan & Northern Railroad (SFSJ&N). The authorized capital stock was a nominal $50,000. The incorporators were listed as Abram I. Kaplan, Morris Astor, and H. F. Mela, all of New York; and Sidney M. Weil and Guy Rogers of Albuquerque. Kaplan was recognized as the majority stockholder (Albuquerque Journal 1928 [December 20]).

The application to the ICC to operate the line as a common carrier was approved on July 8, 1929. In its approval, the ICC authorized the SFSJ&N to

(1) operate its own line of railroad,

(2) construct an 11 mile extension from Tilden to the village of Cuba, and

(3) operate under trackage rights over the SFNW between San Ysidro and Bernalillo.

Next, the SFSJ&N was granted authority by the ICC to issue its common stock, which was to be delivered to Abram I. Kaplan in payment for the railroad property, the trackage rights, and the cash advanced for construction. Therefore, it was not until November 1, 1929, that the SFSJ&N actually began operation as a common carrier, ready to serve the general public (154 ICC 473; 154 ICC 741).

In the meantime, Kaplan had also acquired a controlling interest in the Santa Fe Northwestern Railway, the connecting link between the SFSJ&N and its customers. This eased the way by

allowing the SFSJ&N to open for business using many of the resources of the SFNW (193 ICC 545).

During the first ten months of 1929, while SJC&C was running its own trains, about 400 carloads of coal were shipped out of La Ventana. The Cleary mine of SJC&C continued to be, by far, the largest producer. As the year progressed, small shipments were made by two additional mines: the Nance mine of the White Ash Coal Company and the Anderson mine (Figures 59 and 60) owned by the Carbon Coal Company (Dane 1936).

In the meantime, the New Mexico State Corporation Commission (NMSCC) had been watching the SFSJ&N situation closely. As the railroad made its preparations to commence public operation, the NMSCC published new rates for hauling coal within New Mexico. The rates for carrying coal from the Waldo, Raton, Dawson, and Gallup districts were reduced, while the La Ventana rates were increased. The rates for moving coal from La Ventana to Albuquerque, Las Vegas, and Belen were set the same as those for coal shipped from Gallup to the same points. Thus, coal from Waldo was cheaper to move from the mines to Albuqueruqe. Both Weil and SJC&C complained formally to the commission, and on November 6, 1929, the NMSCC set the La Ventana rates at 20 cents a ton above the Waldo district rates. This reduced some of the competitive advantage of the La Ventana coal (New Mexican 1929 [October 17]).

The railroad to La Ventana was changed very little when the SFSJ&N began its operations. About the only visible change was the use of SFNW locomotives to handle the trains of coal cars. The coal business held up well with 220 cars going out during the last two months of 1929. During 1930 a total of 853 carloads were moved from La Ventana, and 353 carloads were shipped during the first four months of 1931 (Wickens 1960; 193 ICC 545).

Maintenance of the SFSJ&N track and bridges was also taken over by the SFNW. Charlie Pratt, then the Master Mechanic of the SFNW, remembers that it was his regular duty during the summer thunderstorm season to telephone La Ventana every Monday to determine how many bridge timbers and ties had to be cut to repair the latest washouts. Usually, repairs to the soft roadbed could be accomplished before the next coal train ran (Pratt 1960)

Sometimes the washouts caught one of the infrequent trains and dumped a car or two into the sandy streambed. At one time, the railroad had two cars (a box car and a tank car) buried in sand washed downstream from the mountains. For a time, a shoo-fly track and temporary wooden trestle bypassed the wrecked cars (Gallagher 1988).

The joint SFNW/SFSJ&N employees' timetable issued

Figure 59. Loading chute at Anderson Mine, west of La Ventana; October 27, 1973. Photo by Vernon J. Glover.

Figure 60. Site of Anderson Mine, west of La Ventana; October 27, 1973. Photo by Vernon J. Glover.

on October 12, 1930, provided further details of SFSJ&N operations. Trains were scheduled to run only on Wednesday, compared to daily except Sunday, on the SFNW. Running times averaged about 15 miles per hour, which was almost too fast for the heavy coal cars on the soft roadbed. The only source of boiler water for the locomotives remained the SFNW tank at San Ysidro, but coal fuel was available at La Ventana (SFNW/SFSJ&N 1930 [October 12]).

During 1929 and 1930, the general economy had been slowing; and the market for coal decreased. Evidently, the money to repair the regular washouts of the SFSJ&N came to an end in 1931. When two trestles were washed out during April of that year, the anticipated repairs were not made and the railroad ceased running. Once more SJC&C had to resort to the courts in order to keep up its coal shipments. This time J. G. Cleary of SJC&C filed a complaint in the District Court, Second Judicial District of New Mexico, requesting the appointment of a receiver to manage the SFSJ&N. The coal company was itself in receivership, with little hope of financial recovery unless coal shipments could be resumed. Months passed; but on October 14, 1931, the court ordered the SFSJ&N into a limited receivership, appointing George C. Taylor as receiver (193 ICC 547; Albuquerque Journal 1931 [October 14]).

Taylor took his appointment seriously, and he went right to work repairing his railroad. By November 12, 1931, service had been restored and the coal trains ran down the line once more. The repairs had been made quickly and cheaply, simply by laying the track on the ground across the shallow watercourses and bypassing the damaged trestles. The catch, of course, was that these usually dry gullies would run with water again after the snow melted in the mountains. This simple approach worked fine through the winter, and a few more carloads of coal managed to get to customers. But the running water washed out the railroad once more on April 15, 1932, just about a year after the earlier washouts (193 ICC 547).

In the meantime, another legal side show opened to affect the railroad. During May, 1931, Abram Kaplan was sued by Matthews and Eggleston, the contractors who had graded the line, alleging nonpayment of $15,000 cash in consideration under their agreement not to bid on the Santa Fe Northern Railroad when it was sold at auction on September 5, 1928. Another interesting fact came to light as the suit was argued. Eggleston and Matthews still held a lien on the railroad in the amount of $75,443.89, that being the value of the grading work performed by them back in 1924. Evidently, Weil had talked them into contributing their labor, but had never gotten around to paying them (Albuquerque Journal - Evening Edition 1931 [May 26]).

George C. Taylor was appointed general receiver of the company on April 2, 1932, just before the line was washed out for the season. He waited until autumn to rebuild the washed out track, thus avoiding the expense of continual repairs during the summer thunderstorm period. Service resumed once more on November 5th. Only a few cars of coal were shipped out, however, before the railroad was shut down due to a lack of coal customers. The last train ran on December 5, 1932. This was, as it happened, the last revenue train ever to run on the SFSJ&N (193 ICC 547).

The SFSJ&N remained idle, but Taylor made one more attempt to breathe life into the moribund property. On April 4, 1933, he applied to the ICC for their approval of a proposed loan from the Reconstruction Finance Corporation in the amount of $50,000. In his application, Taylor described the condition of the railroad in some detail. There were the two washed out trestles as well as many other washouts repaired with loose dirt and rock. The railroad had no suitable rolling stock, and it had no means of communicating between operating points.

Taylor proposed to spend $10,000 to replace the two trestles and provide flood protection; $12,500 for tie renewal; $5,000 for other bridge repairs; $13,000 for locomotives and a telephone line; and $4,500 for a water supply and other facilities. Unfortunately, the ICC concluded that the prospective earning power of the SFSJ&N did not offer reasonable assurance that the loan would be repaid, and approval was denied (193 ICC 547).

The general decline in the coal market, coupled with the impossibility of train service, appears to have been fatal to the La Ventana coal mines. No further production of coal from the district was recorded following the 1932 washouts (Dane 1936).

It took a long time to bury the SFSJ&N. Nothing happened for years, and the railroad lay idle in the high desert (figure 61). The two SJC&C locomotives remained at La Ventana, slowly deteriorating. Occasionally Charlie Pratt, still Master Mechanic of the SFNW, would journey up to

Figure 61. Abandoned hulk of San Juan Coal & Coke Company locomotive Number 2, circa 1938, near La Ventana.

La Ventana to salvage a useful part from one of the locomotives. Once he removed a set of pilot truck wheels from Number 377 for use on one of the SFNW locomotives of the same class (Pratt 1960).

It was not until 1939, when various creditors made some claims against the company that further attention was given to the SFSJ&N. J. G. Cleary and A. R. Yarborough brought suit in district court for various causes, mostly for payment for services and for reimbursement of expenses incurred during the receivership. The AT&SF intervened in court to enforce their claim of ownership of the rails and fastenings based on the old contract with the Cuba Extension. On April 5, 1939, the court affirmed the ownership of the rail by the AT&SF and approved the other claims against the SFSJ&N (Albuquerque Journal 1939 [April 6 and December 13])

George C. Taylor, who had remained the receiver of the SFSJ&N throughout the years, commented on the troubles of the railroad. He noted that it was subject to washouts when there was a heavy dew, and for that reason his efforts to operate the line with a leased locomotive were failures. He added that creditors of the line had gotten hold of some of its earning, leaving him with no cash to operate the road.

Shortly thereafter the remaining property of the railroad (the right-of-way and the few pieces of useless rolling stock) was sold for $1,000 to J. G. Cleary. And on May 19, 1939, in a final move, the court dissolved the SFSJ&N (Albuquerque Journal 1939 [March 4, April 6, May 20, December 13]).

At some later date, probably about 1941, the AT&SF got around to reclaiming its property along the SFSJ&N line. The rails were lifted and trucked out following a minor skirmish in court with a prospective shipper of cement from the vicinity of La Ventana. There were also several AT&SF coal cars remaining on the line, which had to be trucked out to Bernalillo (Pratt 1960; Albuquerque Journal 1939 [December 13]).

Even after the railroad had all but disappeared, one last bit of bureaucratic tidying up remained to finish the story of the SFSJ&N. During the SFNW abandonment proceeding in 1941, someone remembered that the agreement covering trackage rights between San Ysidro and Bernalillo was still in effect. The abandonment of these trackage rights was approved by the ICC at the same time as the abandonment of the SFNW, October 28, 1941 (249 ICC 342).

The two SJC&C locomotives left at La Ventana remained there for several more years. Various parts had been removed from time to time, and one even lay on its side in the soft ground where the

rails had been removed. Finally, during the scrap drives of World War II, the locomotives were cut up where they lay, and the pieces were hauled down to Albuquerque (Pratt 1960).

It had taken the SFSJ&N a long time to disappear, far longer than the period it had actually operated. From the vantage point of time, and in consideration of the dismal production figures recorded for the mines at La Ventana, it is doubtful if any of the investors or builders of the railroad ever received even a token return on their investments.

Figure 62. Looking south from the Anderson Mine near La Ventana. The abandoned road bed of a railroad spur curves from right to left in this October 27, 1973 photo by Vernon J. Glover.

CONCLUSION

The logging industry envisioned by Sidney Weil and brought into being by the Porter family proved to be an enduring and profitable enterprise. Modern trucks running on paved highways superseded the Santa Fe Northwestern Railway, but the areas logged extended for miles beyond its length into the Santa Fe National Forest and the Valle Grande. It was not until the 1970s that large scale logging in these areas slowed to a halt. For most of these years, the route of the SFNW served as the main haulage route for logs going to the mills, confirming its value as a route into the mountains. Even today, as a forest road, the old railroad bed provides access to a large area of the Cañon de San Diego Grant.

Similarly, the primitive La Ventana coal mines can be viewed as the predecessors of the immense strip mines of the San Juan Basin. Based in part on the same coal beds, the La Ventana mines failed for lack of customers and transportation, not for any lack of coal.

All in all, Sidney Weil's visions of development have come to pass for the most part, although it has taken about two generations for them to come to fruition.

Figure 63. The approach to the first tunnel in Guadalupe Box. The road seen on the left is directly on the old railroad bed. This view was photographed on August 21, 1960, by Henry E. Bender, Jr.

APPENDIX A

LOCOMOTIVE ROSTERS

Locomotives in the Jemez Mountains

The railroads in the Jemez mountains used only a few locomotives, but those were of widely varying designs and origins. Few, if any, were particularly distinctive in terms of design or history, but they did their work well under often difficult conditions. The locomotives typically fell into one of two groups. The first group consisted of obsolete main line locomotives, purchased from used-equipment dealers or from the AT&SF. The latter road did all it could to assist a connecting line such as the SFNW, because it had the potential of being an important source of traffic and revenue. The second group was made up of specialized logging locomotives purchased new directly from the builders. These locomotives were masters of their work, having been designed specifically for conditions encountered in the woods: uncertain roadbeds, uneven track with light rail, steep grades and bad water.

The accompanying Locomotive Rosters (Tables 5 and 6) list every locomotive known to have operated on the railroads in the Jemez mountains. It is very likely that there were additional locomotives belonging to a construction company or leased from the AT&SF. Specific details on such locomotives, however, are lacking. The Tables also list, where known, the locomotive wheel arrangement, builder, date built, builder's serial number, and some key dimensions and weights. This information is expressed in an abbreviated form, which may best be explained by the following example:

102 2-8-0 Schenectady #5620, 1900 51-22x26-168500

102 is the road number, i.e., the number assigned to the locomotive by the operating company. It is usually found painted in several places, and on a cast number plate on the smokebox front of the locomotive.

2-8-0 represents the locomotive wheel arrangement in the Whyte system. The first digit counts the pilot truck wheels, the second digit counts the driving wheels, and the third digit counts the trailing truck wheels (Figure 64). A zero is used to indicate no wheels at a location, and "T" indicates a tank locomotive carrying fuel and

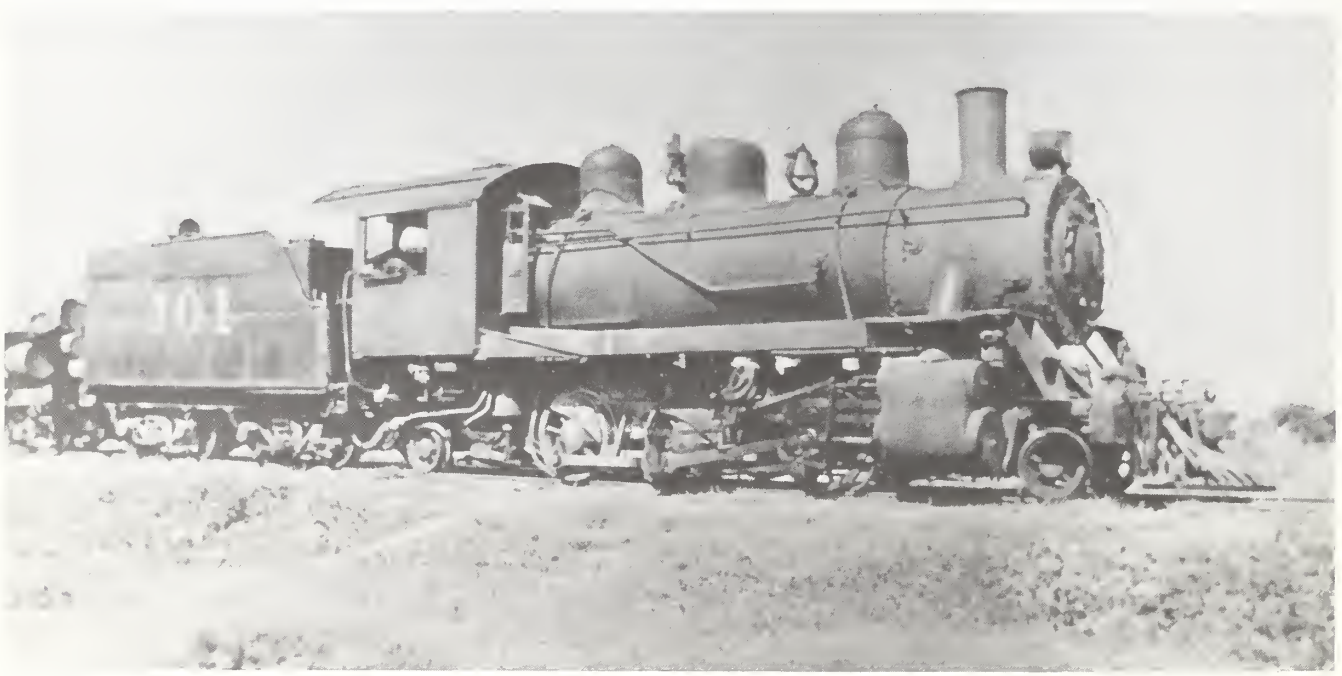

Figure 64. Locomotive Number 101, a 2-6-2 type, of the Santa Fe Northwestern Railway switching log cars at Bernalillo, on September 13, 1937. Photo by Preston George from the collection of John B. Moore, Jr.

water on the locomotive itself rather than in a separate tender. Gear drive locomotives are indicated by "3T Heisler" or "2T Climax," showing the number of drive trucks and the specific design.

Schenectady #5620, 1900 is the builder, builder's serial number, and date built (either year or month/year). The serial number is usually found on a cast plate attached to the side of the smokebox, and often it is stamped into other parts of the locomotive. The builders of concern here include the following:

American Locomotive Company, Richmond (Virginia) Works
Baldwin Locomotive Works, Philadelphia, Pa.
Climax Manufacturing Company, Corry, Pa.
Davenport Besler Corporation, Davenport, Iowa
Heisler Locomotive Works, Erie, Pennsylvania
Pittsburgh Locomotive and Car Works, Pittsburgh, Pennsylvania
H. K. Porter Company, Pittsburgh, Pennsylvania.

51-22x26-168500 gives some of the key locomotive dimensions:

51 is the driving wheel diameter in inches;
22x26 is the diameter and stroke of the cylinders in inches.
168500 is the total engine weight in pounds.

The term "light weight," when used, is the weight of the locomotive without its normal load of fuel and water. The weights of the gear drive locomotives, given in the form "70 tons," are the nominal weights of typical locomotives of the same class. Actual locomotives varied widely from this figure, depending on the mechanical details specified by the purchaser.

Table 5. Locomotives of the Santa Fe Northwestern Railway

Road Number		Description	
"The Dooley"	2-4-2T	Baldwin	12 tons weight
101	2-6-2T	Porter #6818, 6/1923	44-20 x 24 - 174000 (estimated)
102	2T Climax	Climax	72 tons weight
103	2-8-0	Alco (Rich) #49933, 6/1911	46-21 x 24 - 147000
104	3T Heisler	Heisler #1538, 1/1927	36-16 3/4 x 14 - 140000
105	3T Heisler	Heisler #1596, 1/1930	38-17 1/4x 15 - 196000
106	4-6-0	Pittsburgh #982, 3/1888	58-19 x 26 - 117150
107	4-6-0	Pittsburgh #990, 3/1888	58-19 x 26 - 117150
	0-4-0	Davenport Besler Corp. #2343, 6/1941	160 hp., 20,000 weight

Histories:
The Dooley. Said to be one of George E. Breece's locomotives brought from the east about 1920, used initially at Thoreau, N.M., and then at Bernalillo during construction of the SFNW. Later used as a mill and shop switcher.
101. New, lettered "SANTA FE & NORTHWESTERN." Converted to 2-6-2 tender type circa 1930. Remained at NML&T Bernalillo mill as switcher after 1941. Scrapped ca. 1950. Various attempts were made to sell this locomotive to Arizona logging operators between 1942 and 1944.
102. Reportedly obtained from a Porter Lumber Company operation in West Virginia. Destroyed by boiler explosion, December 31, 1927.
103. Purchased July 26, 1926, from Birmingham Rail & Locomotive Company, was Marion & Rye Valley Number 101. Converted from coal to oil fuel ca. 1930; received former AT&SF tender. Final disposition unknown.
104. New, lettered "WHITE PINE LUMBER COMPANY." Destroyed by boiler explosion, August 16, 1936.
105. New, lettered "SANTA FE NORTHWESTERN" and named "W. T. BOOKHAMER." Relettered "N.M.L.&T Co." during 1937. Sold during 1941 to Southwest Lumber Mills, Inc., McNary, Arizona; operated at McNary and Flagstaff, Arizona. Scrapped after June, 1948.
106. Purchased February 18, 1930. Was AT&SF 365, Santa Fe Pacific 65, Atlantic & Pacific 65. Scrapped about 1941.
107. Purchased March 5, 1930. Was AT&SF 373, Santa FE Pacific 73, Atlantic & Pacific 73. Sold ca. 1942 to Richmond Rock Wool Company, Rheem, California, as a stationary steam boiler. Scrapped ca. 1945.
- Purchased ca. 1946. Was U.S. Army Number 7703. Used until the mill at Bernalillo closed in 1973 and is now on display in city park in Bernalillo.

Figure 65. Locomotives 101 and 103 at the scene of the derailment of Number 103's tender, circa 1927. Number 101 is seen here in its original form (2-6-2T) with side tanks for water and no tender. Photo by A. L. "Red" Gleason; Gene Harty family collection.

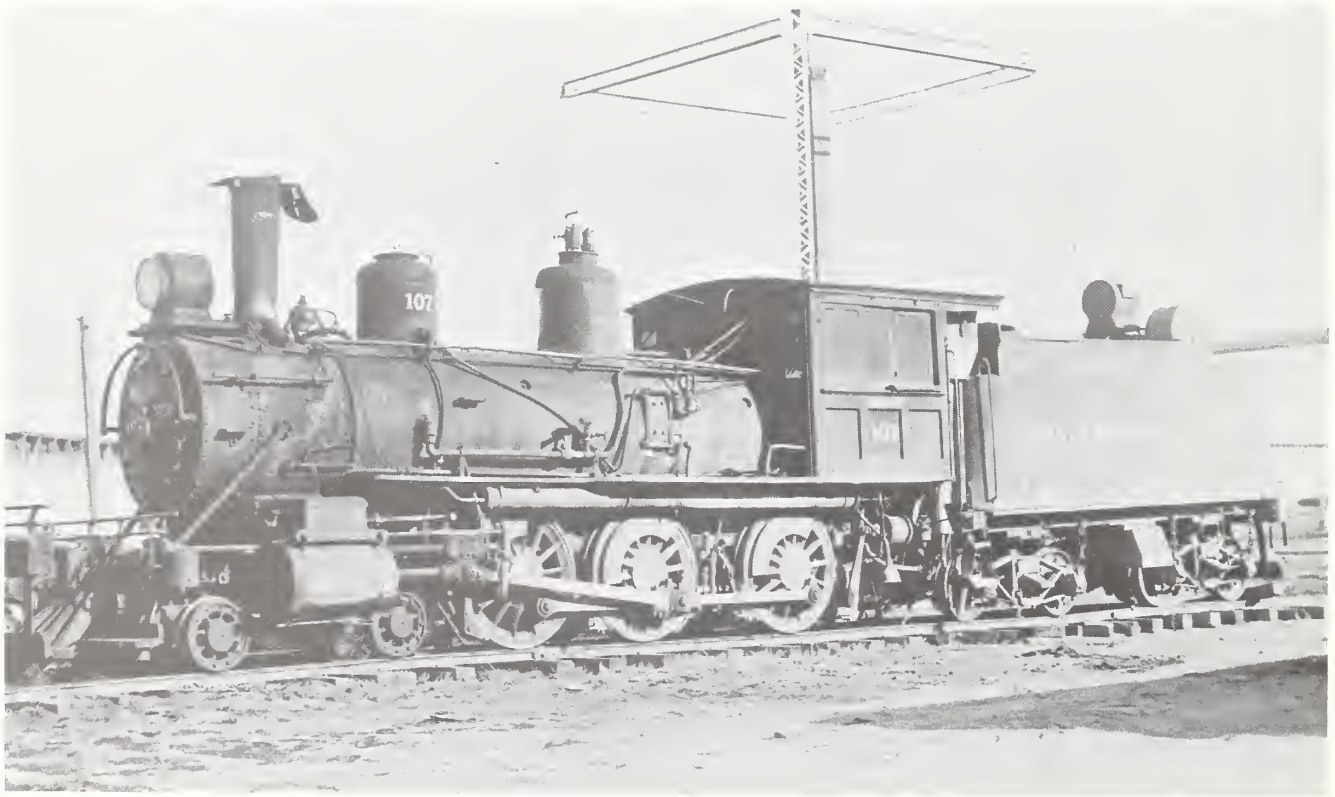

Figure 66. Santa Fe Northwestern Railway locomotive Number 107 behind the Bernalillo engine house. At this time (May 25, 1933) the locomotive burned coal fuel and retained its AT&SF coal tender. Photo by Gerald M. Best.

Figure 67. A 3T Heisler, locomotive Number 105, of the Santa Fe Northwestern Railway at Bernalillo, circa 1933. Log car Number 244 shows its open-frame construction and folding-stake log bunks. Photo by Charlie Pratt.

Table 6. Locomotives of the San Juan Coal & Coke Company

Road Number		Description	
377	4-6-0	Pittsburgh #994, 1887	58-19 x 26 - 117150
2	4-6-0	Baldwin #19477, 1901	63-20 x 26 - 149950

Histories:

377. Purchased February 1, 1929. Was AT&SF 377, Santa Fe Pacific 77, Atlantic & Pacific 77. Scrapped between 1941 and 1945.

2. Purchased ca. 1929. Was New Mexico Midland number 2, as well as El Paso & Southwestern 120, and El Paso & Northeastern 6. Scrapped between 1941 and 1945.

APPENDIX B

These additional figures include more views of the railroads and other aspects of logging on the Santa Fe National Forest. The hunt for historic photographs to use in this book was particularly fruitful. Private collectors have been very generous in sharing with the author and there are probably many more views in private hands and unknown to the author or the Forest Service. This created the happy problem of providing more good pictures than could be integrated with the text. Also, the costs of publication prevent us from being able to include every known photograph related to these railroad operations. In this Appendix we present some views of the people and facilities at O'Neil Landing which include much information that will be appreciated both by historians and archeologists. Those are followed by pictures of additional logging equipment and of several "speeders" used in the Jemez Mountains.

Figure 68. An American Hoist and Derrick diesel loader working at O'Neil Landing in the summer of 1939. The logs, of apparent 32-foot length, are being loaded on SFNW steel log cars. Typical portable living quarters may be seen beyond the cars. Once the local harvest was complete, these buildings could be hoisted aboard flat cars and taken to a new location. This portability is significant to archeologists who later find only a few foundation stones where once many men lived. Photo by Yale Weinstein.

Figure 69. Pawling and Harnischfeger (P&H) tracked loader working at O'Neil Landing circa 1937 - 1939. The rail cars are AT&SF Class Lg-1 logging flat cars equipped with four bunks for carrying logs ranging from about 12 to 36 feet in length. Photo by Yale Weinstein.

Figure 70. Bachelor quarters at O'Neil Landing during the winter shutdown, circa 1939. It looks as if the roads were closed. Photo by Yale Weinstein.

Figure 71. In camp at O'Neil Landing circa 1939. From left to right: Harry Ramsey, loaderman; Ray Stout, a truck driver who lived in San Ysidro; J. F. Cooke, truck driver; John Babich, office manager. Photo by Yale Weinstein.

Figure 72. A log dump and several shanties at O'Neil Landing circa 1939. Photo by Yale Weinstein.

Figure 73. Dumping a truck load of 16-foot logs at O'Neil Landing, circa 1937 - 1939. Superintendent Don Curnutte (left, back to camera) watches. Photo by Yale Weinstein.

Figure 74. Joe Goldberg reading in his bunk shack at O'Neil Landing circa 1939. He graduated from the School of Forestry of the University of Iowa, where he also played football. He was later a paratrooper in the Pacific theatre during World War II. Note the simple construction of the portable building. Photo by Yale Weinstein.

Figure 75. Work area at O'Neil Landing circa 1939, showing (left to right) Bucyrus-Erie Loadmaster, Caterpillar tractor, and office shack. Photo by Yale Weinstein.

Figure 76. Working on a Caterpillar tractor at O'Neil Landing, circa 1939. This open-air workshop was typical of working conditions in the woods. Photo by Yale Weinstein.

Figure 77. Log trucks at O'Neil Landing circa 1939. These vehicles were used for the hauls from logging in the Rio de las Vacas watershed in the Santa Fe National Forest to O'Neil Landing, and from the Baca Location to Canyon Landing. From left to right: road grader, Kenworth diesel truck Number 1, and red-painted White trucks Numbers 2 through 5. Photo by Yale Weinstein.

Figure 78. Loading 32-foot logs at O'Neil Landing with crane and peavey; summer 1939. Photo by Yale Weinstein.

Figure 79. The truck repair shop area at O'Neil Landing, circa 1939. Some empty railroad log cars can be seen in the background. Photo by Yale Weinstein.

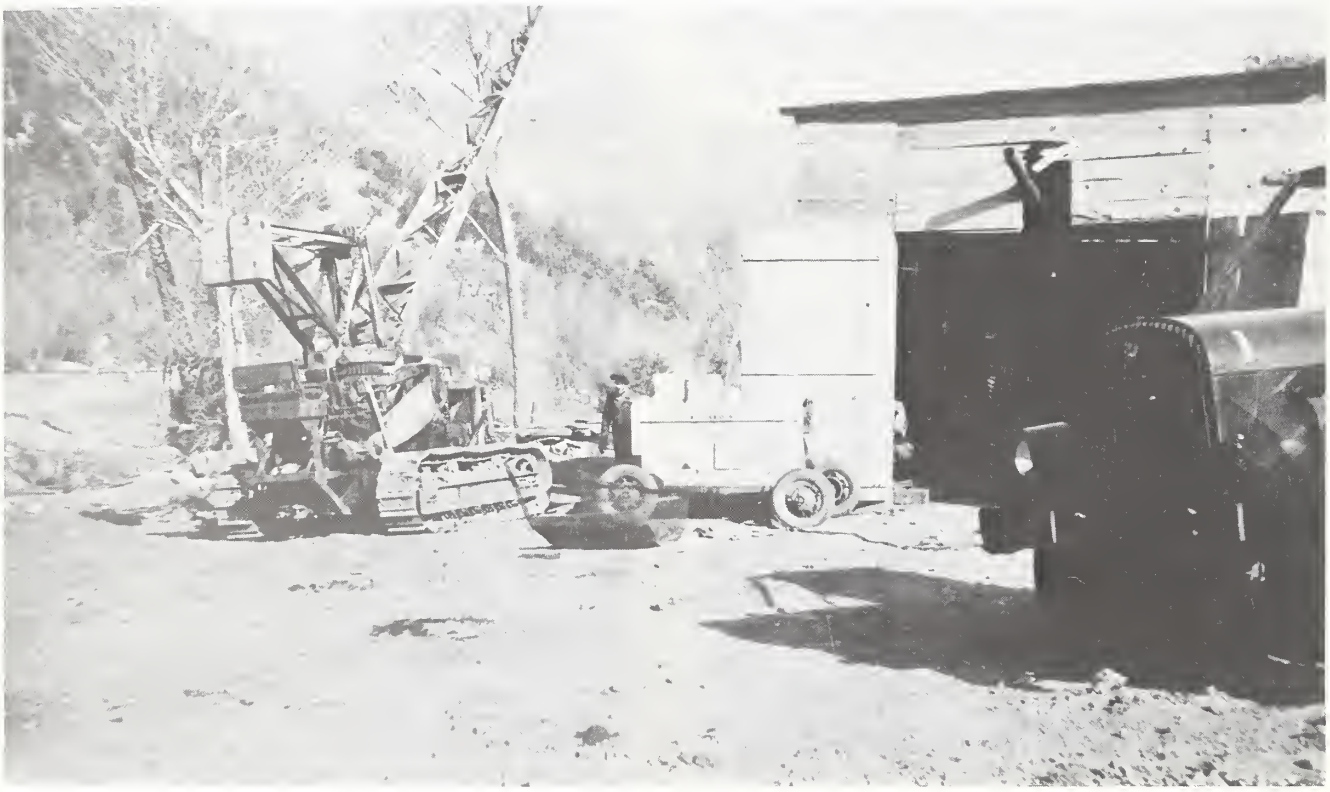

Figure 80. The truck repair shop at O'Neil landing circa 1939. Equipment (from left to right) is the Bucyrus-Erie Loadmaster, a Lincoln electric welder, and the nose of the Kenworth diesel log truck Number 1. Photo by Yale Weinstein.

Figure 81. Don Curnutte, logging superintendent, in a quiet moment at O'Neil Landing circa 1939. Photo by Yale Weinstein.

Figure 82. Walter Giles, the cook at O'Neil Landing, circa 1939. Photo by Yale Weinstein.

Figure 83. James F. Cooke at the O'Neil Landing truck shop, circa 1939. Cooke was a truck driver and known for his fastidious habits in the rough-and-ready camp. He habitually wore a clean shirt every day and pulled on heavy gloves to drive. Photo by Yale Weinstein.

Figure 84. Track maintenance man Melisandro Martinez with his "speeder" or track motor car, circa 1937 - 1941. He lived at Canyon. Photo by Yale Weinstein.

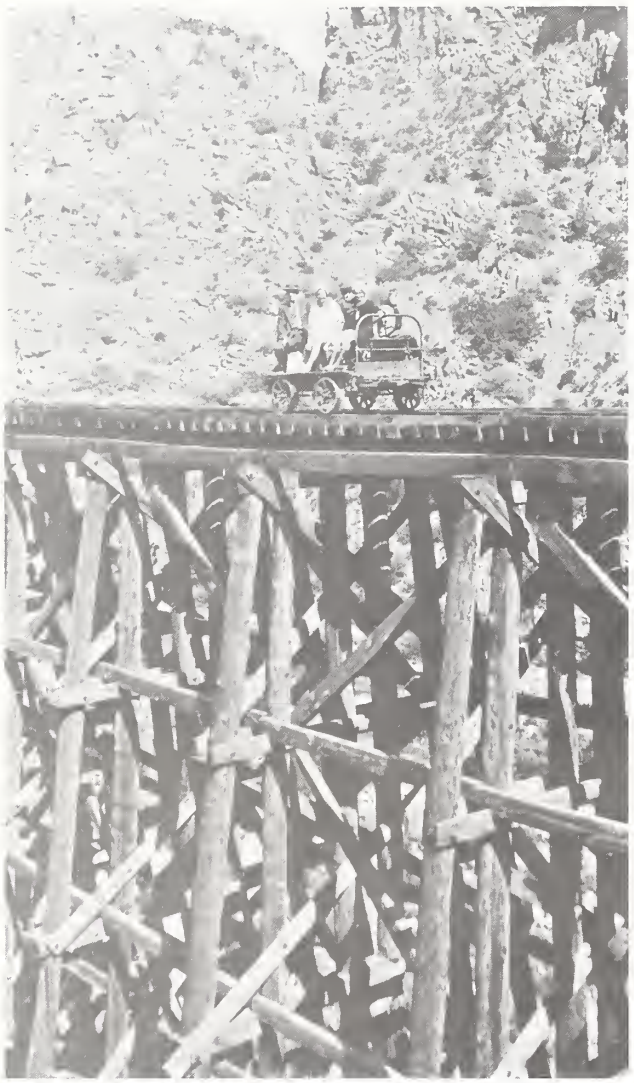

Figure 85. A conventional railroad motorized section-car posed on one of the tall trestles along the Rio Guadalupe circa 1932. This image was made during a family outing rather than a workday. Photo from the collection of T. P. Gallagher, Jr.

Figure 87. Log loader and crew at work during the summer of 1939 at O'Neil Landing. Photo by Yale Weinstein.

Figure 86. Santa Fe Northwestern Railway locomotive Number 101 switching log cars at the Bernalillo mill circa 1941. Photo by Charlie Pratt.

Figure 88. Lumber company employees aboard a railroad speeder, circa 1937 - 1941. From left to right: Boyd Curnutte, mechanic; unknown; Ray Stout, truck driver; Cone Selby, truck driver; unknown; John Babich; Will Everett. Photo by Yale Weinstein.

Figure 89. A mechanic looks over the damage to loçomotive Number 101 turned over at a log landing circa 1927. Photo by A. L. "Red" Gleason from the Gene Harty family collection.

Figure 90. An American Hoist and Derrick loader at O'Neil Landing in the summer of 1939. The steam-to-diesel conversion is evident. The steam boiler, cylinders, and water tank were removed and replaced by a diesel engine and power take-off mounted on a slide-in frame. Will Everett is the loaderman. Photo by Yale Weinstein.

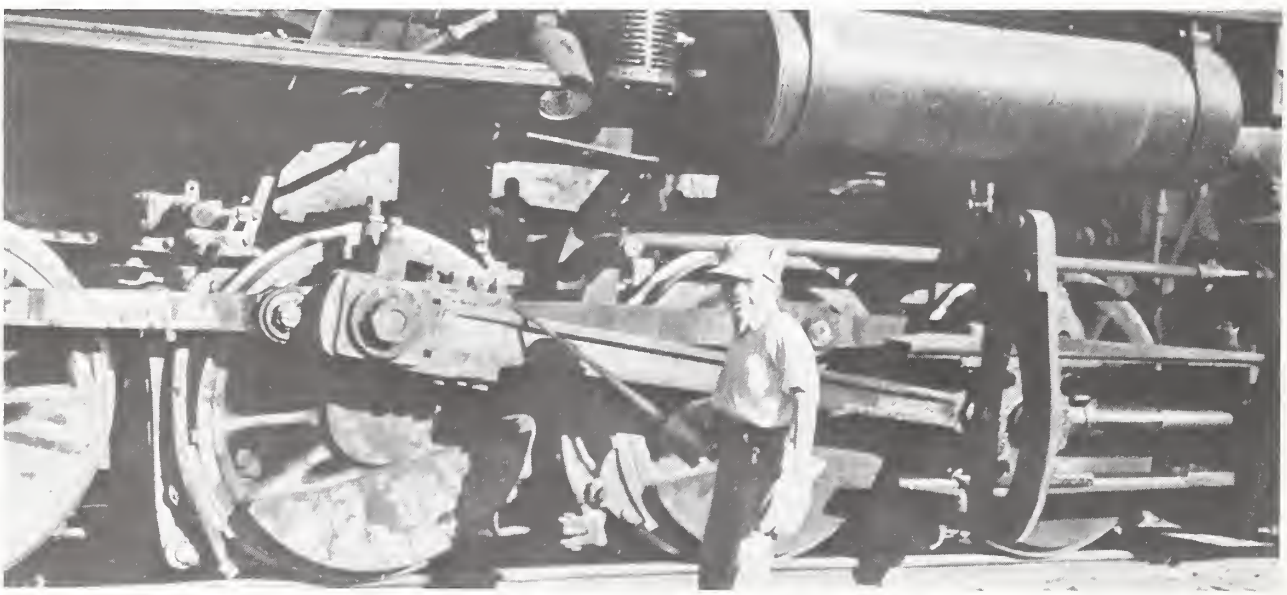

Figure 91. T. P. Gallagher, Jr., as a young man "oiling around" the running gear of locomotive Number 103. As a youngster growing up in the lumber industry, Gallagher became familiar with the railroad and its locomotives. Photo from the collection of T. P. Gallagher, Jr.

Figure 92. A Bucyrus-Erie Loadmaster at work in the woods, circa 1937 - 1941. This machine combined the features of a Caterpillar tractor and a power crane in one unit capable of lifting, moving, and loading logs efficiently. The boom was capable of rotating as well as lifting, although the lack of outriggers must have severely limited its capacity while positioned to the sides. Photo by Yale Weinstein.

Figure 93. Unloading log cars at the Bernalillo millpond circa 1941. These cars were steel AT&SF cars of Class Lg-1 with tall folding stakes. The photo is from the Charlie Pratt family album.

Figure 94. A Caterpillar tractor skidding a very large log with a Hyster steel arch, also on tracked wheels. This view, from the C. O. Clark collection, probably dates from the 1930s.

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